The American Artisan
And Hardware Record

Vol. 56. No. 24. CHICAGO, DECEMBER 12, 1908. $2.00 Per Year.

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All Kinds of
BOLTS, RIVETS, NUTS, WASHERS, CARRIAGE FORGINGS, ETC.
Send for 1908 Catalog "R." Prices on Application
COLUMBUS BOLT WORKS, Columbus, O.

GET THE LIVE LINE
"AMERICAN SEAL"
Elastic Oil Roofing Cement, Stove Putty and Asbestos Furnace Cement
For Furnaces, Stoves, Ranges and Roofs.
Jobbers write to-day for prices
THE
Wm. Connors Paint Mfg. Co.
Makers. TROY, N. Y.
Western Agents: Friedley-Voshardt Co., 194 Mather St., Chicago, Ill.
Southwestern Agents: Stockhoff Supply Co., 107 N. Main St., St. Louis, Mo.

The LARGEST Exclusive WHOLESALE Net Price Catalogue House in the World of
Cutlery, Hardware and House Furnishing Goods
Large Catalogue Will Be Sent on Request to Merchants Only.
CHAS. WEILAND
147-149 Chambers Street, 129-131 Reade Street, New York City
Cutlery and Mechanics' Tools my Specialty.

MATCHLESS
Spring and Pivot Hinges
Floor Hinges, Jamb Hinges and Hardware Specialties.
The fact that Matchless Spring Hinges have been on the market since 1895 and that in that time not one set has required repairs from fault of hinge speaks very well for their serviceability and wearing qualities.
If your Jobber cannot furnish them write us.
LAWSON MFG. CO.
40 Dearborn St., Chicago, Ill.

NEW DESIGN WORLD'S BEST
TUBULAR TRACK DOOR HANGER

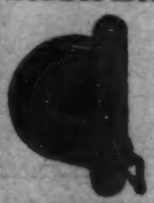
We have increased the diameter of the wheel to 2¼ in., making it the easiest running Hanger on the market.
The supplementary wheel prevents derailment. Frame is made of the best grade malleable iron. Finished in Aluminum and each pair packed in an individual box, complete with bolts. The track brackets are slidable and may be placed at any point desired. We do not sell catalog houses. Write for prices.
SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio Hamilton, Ont., Can.

"NEVER-BREAK"
TRADE MARK

Catalog Free
"NEVER-BREAK"
STEEL SPIDERS, GRIDDLES AND KETTLES
WILL NOT Scale Off like cheap enamel.
WILL NOT Scorch or Burn like light fry pans and skillets.
WILL NOT Absorb Grease or Flavors like cast Iron.
THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers
"NEVER-BREAK" Goods.

The Highest Grade File Made.
DELTA
TRADE MARK DELTA
DELTA FILE WORKS
CARVER FILE CO.
PHILADELPHIA, PA.
An independent organization not connected with the trust in any form, shape or manner.
FILES OF QUALITY
FILES
The File You Will Eventually Use.

PULLMAN
SASH BALANCES



Are you selling them?
IN USE EVERYWHERE
Send us your orders
PULLMAN MFG. COMPANY
SOPHIA STREET
ROCHESTER, N. Y., U. S. A

100
Tinners' Patterns
Complete for
$1.00
Sent Postpaid on Receipt of Price
Daniel Stern
353 Dearborn Street - Chicago

This Would Please
MOTHER
ON CHRISTMAS

TRY THIS IN YOUR WINDOW

Make Christmas A STEEL RANGE SEASON

Good Luck-Tremont-Cinderella

Steel Ranges (as shown) at $40.

Steel Ranges with Res. at $45.

Pay YOU a SNUG PROFIT

Why let the Sewing Machine Man beat you out with a $65.00 Proposition. A sewing machine is used an hour or so once or twice a week. **A STEEL RANGE** cooks three meals a day—Does the baking and ironing and keeps the house warm while you sleep.

The facts are in your favor.

Stove & Range Co. of Pittsburgh

Good Values in Stoves

PITTSBURGH, - PENNSYLVANIA.

The 11th in a Series of Reasons Why the KELSEY is the Best Warm Air System

There's a PROFIT in it for YOU!

You know the trouble you've had in the past to land heating jobs—with an ordinary furnace! It's been a question of price. Because you had nothing else on which to base your reason why you ought to have the job.

We've always said that the Dealer who has the exclusive agency for the KELSEY Warm Air Generator can easily have the cream of the heating business in his locality.

And that is true, — not merely in two or three cases, — but in nearly every one of the 800 KELSEY Agencies.

The KELSEY Dealer does **not** talk price,—he tells about the immense heating capacity of the KELSEY,—**more than double** that of the ordinary furnace of equal size; he talks about the even distribution of warm air,—to every part of the building,—something impossible with the ordinary hot air furnace; he explains **with facts and figures,** how the KELSEY **actually burns less fuel** for the volume of warm air produced; he points to over 34,000 KELSEY Generators in successful operation today,—in small cottages, in city homes, in magnificent country estates, in schools and churches of all sizes.

And with live, interesting facts to present,—that swing the prospect around to your way of thinking,—the question of price dwindles away. Not in theory,—but in actual, every day work!

And before you know it,—you have the job,—at your own figure,—**with a profit in it for you!**

If you want a live proposition, that gives a living profit,—better ask for the KELSEY Exclusive Agency in your town,—before somebody else gets it.

There's Money In It For You!

KELSEY HEATING COMPANY, Syracuse, N. Y.

NEW YORK, 156 Fifth Avenue

CHICAGO: Van Evera & Lewis Mfg. Co., 104-106 W. Lake Street

James Smart Mfg. Co., BROCKVILLE, ONT., Sole Makers for Canada

"IT'S ON LEGS"

LORAIN STEEL RANGE

Built up from the Floor

We want a live dealer in every town to sell the Lorain. Catalogue and discount upon application

MANUFACTURED BY

NATIONAL STOVE CO. DIVISION AMERICAN STOVE CO. **LORAIN, OHIO**

WESTERN BRANCH, 4th and Elm Streets, St. Louis, Mo. PHILADELPHIA BRANCH, 31 North 2nd Street

LORAIN RANGES ARE ALSO SOLD BY

MARSHALL WELLS CO., Duluth, Minn., Winnipeg and Portland. Oregon.
PACIFIC STOVE CO., Los Angeles, Cal. GLOBE MANUFACTURING CO., Oakland, Cal.
HARPER & McINTIRE, Ottumwa, Iowa.

The Only Range

with which it will be possible for you to entirely control the Steel Range business in your town is THE CROWN PRINCESS.

The Only Range that will heat the water in the Reservoir and bake at the same time is THE CROWN PRINCESS.

The Only Range in which every worn out tradition of range building has been entirely departed from is THE CROWN PRINCESS.

The result is that THE CROWN PRINCESS is a range that is far better than the ordinary range, that it is the steadiest seller on the market; that every purchaser is satisfied with its working qualities and that every dealer handling it is more than pleased with its selling qualities.

If you want to know what it is to have a good range business just secure the agency for THE CROWN PRINCESS.

ALLEN MANUFACTURING COMPANY

Distributors
Jno. F. Allen & Co.
Los Angeles, Cal.

STEEL RANGE SPECIALISTS
NASHVILLE, TENN.

Distributors
Wormnest Stove & Range Co.
Grand Rapids, Mich.

A GOOD THING for the RIGHT DEALER

Better Than Most

As Good as the Best

FOSTER'S OPAL

Made in Nos. 8-16, 8-18, 8 and 9-20. All sizes have Duplex Grate.

If desired all sizes can be furnished with STEEL HIGH CLOSET, RESERVOIR, WATER FRONT, OVEN THERMOMETER AND TOWEL ROD.

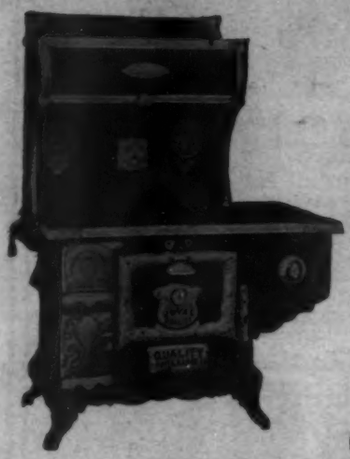
One good, energetic dealer is desired in every town to handle this range. Inquiries are earnestly solicited from all such. Write to-day.

THE FOSTER STOVE COMPANY, IRONTON, OHIO

Munsell's Mica

EUGENE MUNSELL & CO.
NEW YORK AND CHICAGO

THE STANDARD FOR HIGH GRADE STOVES



THE ROYAL QUALITY

All that could be desired in a Range and one which offers every dealer a Royal opportunity to add a big seller to his line.

THE BODY is made of blue steel, lined with asbestos, held in place by sheet steel covering, well riveted.

THE OVEN TOP is arched. Oven bottom is well braced to prevent buckling or warping.

THE FIRE-BOX is arranged with reversible duplex grate, and hot blast linings.

THE RESERVOIR is porcelain lined.

You will like this range and so will your customers. It may be had with the new leg base or with cabinet base. Write for further particulars.

QUALITY STOVE & RANGE CO., - Belleville, Ill.

SAVE HALF YOUR FUEL
BY USING THE

ROCHESTER RADIATOR

Satisfaction guaranteed, or money refunded Over 100,000 of them in use. Fits any stove or furnace.

We make the original and genuine Rochester Radiator.
We do not sell to Catalog Houses.

Price, from **$2.00** to **$12.00**
FOR HARD OR SOFT COAL, WOOD OR GAS.

We refer all inquiries to you from your town when you carry a stock of our Radiators.

We guarantee our Radiators not to interfere with or choke the draught.

They are easily cleaned.

Write for descriptive Catalog and Prices.

ROCHESTER RADIATOR CO., 125 Furnace St. ROCHESTER, N. Y.

Boston, Mass., S. M. Howes Co.; Detroit, Mich., Standart Bros., Ltd.; St. Paul, Minn., Farwell, Ozmun, Kirk & Co.; Omaha, Neb., Wright & Wilhelmy Co.; Sioux City, Ia., Knapp & Spencer Co.; Kansas City, Mo., The Harbison & Modica Mfg. Co.; Kingston, N. Y., Canfield Supply Co.; Portland, Ore., F. W. Isherwood, Esq.; Hamilton Ont., The D. Moore Co.

The MONITOR RADIATOR

BASE BURNER WITH FIVE FRONT FLUES

has *1683 Square Inches* more Radiating surface than any other Base Burner made.

THE BIGGEST SELLER ON THE MARKET

You should secure the Agency at once. *Write today to*

PAXTON & GALLAGHER CO., Omaha, Neb.
Exclusive Distributors for the West

The FUEL$AVER

Will Add $75 to $750 to Your Profits

¶ It's a new automatic heat regulator for furnaces. Keeps the temperature uniform. Reduces the coal bill 25%. Low in price and pays a big profit.

¶ Write for particulars to-day.

F. D. KEES MFG. CO., - Beatrice, Neb.

THE CHAMPION

Hot Water Combination Boilers

They Fit Any Furnace

So constructed that they may be placed directly at the top of the fire, in which position their large surfaces are subjected to the strongest fire, making them powerful heaters. Adapted for use with ALL KINDS of fuel. Will increase the heating capacity of any furnace and reduce the coal bills.

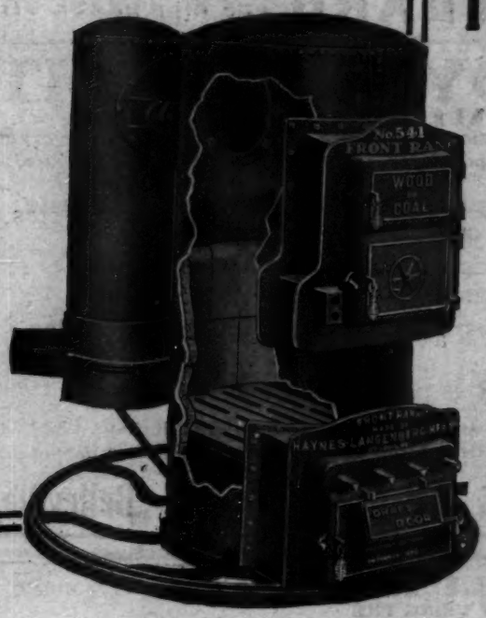
Manufactured only by

FRANK D. STOLZ

156 Webster Ave., Chicago, Ill.

THE PEOPLE'S CHOICE

Has Been Established



Popularity has decided that

FRONT RANK STEEL FURNACES

are ideal and the best in all respects for every home or building in which furnaces are used

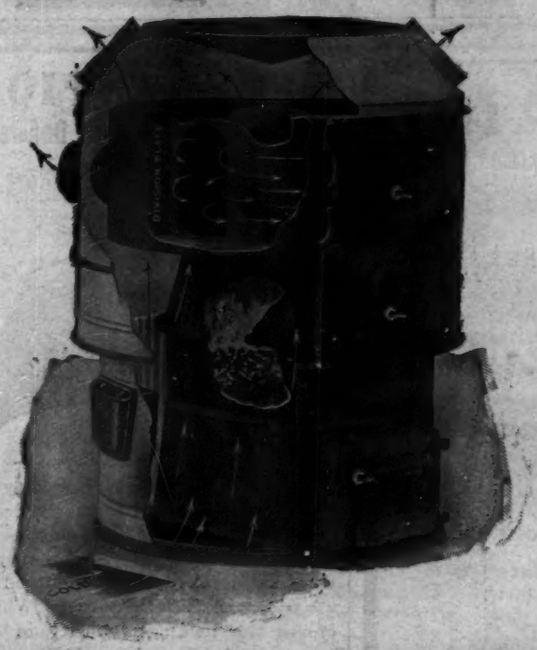
They are durable. They are serviceable. They are economical. Fuel is expensive and **FRONT RANK FURNACES** are great fuel savers. Every bit of heat is utilized—and there is lots of it. They are absolutely Gas tight—ALL DUE TO CORRECT CONSTRUCTION.

FRONT RANK FURNACES have no freak features but there is nothing of **value** known to furnace construction that they lack.

If you want to handle a good substantial furnace, one with selling points, one without faults, a perfect worker and satisfaction giver, write us to-day. Catalog and terms upon request.

HAYNES-LANGENBERG MFG. CO. 4045-4057 Forest Park Blvd., ST. LOUIS, MO. 211-213 Lake St., CHICAGO, ILL.

BOYNTON'S



Square Pot Crusader Furnace

One of the many different styles of Square Pot Furnaces with genuine talking and selling points now being manufactured and sold to the trade.

SEND FOR OUR COMPLETE CATALOGUE.

THE BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO. 207-209 Water St., NEW YORK.

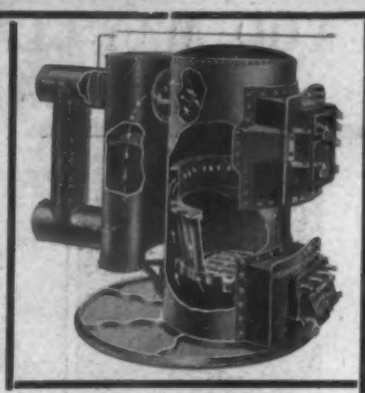
YOU WHOSE BRAIN SELLS THE FURNACES!

YOU WHOSE BRAIN BUILDS THE BUSINESS!

YOU WHOSE BRAIN MAKES THE PROFIT!

Go for a trip over the line of furnaces you are now selling by comparing same with the line of

GREEN FURNACES



Perhaps you will find some feature which will readily appeal to your customers; perhaps you will find that the Green Furnaces combine all of the features on the furnace you are now selling and a dozen more; perhaps you will find a furnace which will appeal to your customers so well that they will gladly pay you $25.00 to $30.00 more than for the furnace you are now selling—this means extra profit to you—even if you find but one furnace in the line which excels your present line and your competitor's you will be well repaid.

Yet if you send for a catalogue you will find a line of modern, up-to-date furnaces, some all cast, some all steel, some part cast and part steel; furnaces for soft coal, hard coal or wood, high priced or low priced furnaces, a furnace to fit the ideas of furnace construction in the mind of each of your customers, furnaces to meet the demands of your trade.

Are you going after the business in 1909. If so you are the man we are looking for—the progressive man, the man who is looking for something better, the man who is trying to give his customers the best, the man who is building his business. We are closing agencies every day. Do you have the agency for our line in your city?

Write us for Catalogue and Discounts.

GREEN FOUNDRY & FURNACE WORKS

Dept. A **DES MOINES, IOWA**

LINCOLN STOVE REPAIR CO., Lincoln, Neb.
State Managers or Nebraska.

ROWE CONSTRUCTION & HEATING CO., Watertown, S. D.
State Managers for South Dakota.

Clean and Tight Like a Boiler

We have erected a new factory in which we installed new 13 ton riveting machines, with which riveting is done by pressure rather than by hammering. This insures all the joints of

American Furnaces

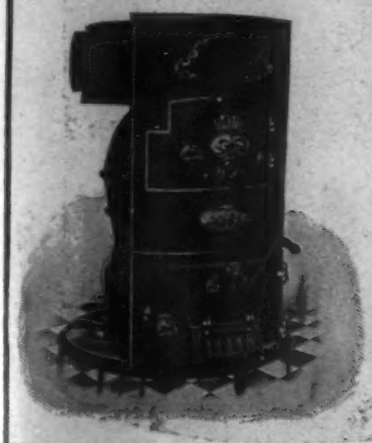
being absolutely tight

DEALERS: A Sample Furnace will be shipped to any responsible dealer in the United States and if after careful examination (we allow you 30 days) it does not prove entirely satisfactory, it can be returned at our expense.

If you are looking for something better, do not fail to investigate.

THE AMERICAN FURNACE CO.

1911-15 Pine Street, **ST. LOUIS, MO**



OUR NEW DE HAVEN ALL CAST FURNACE

Strictly Modern and Up-to-Date in Every Respect

All the latest features in modern furnace construction are embodied in the make-up of this furnace.

FEATURES: Extra Heavy; Gas Tight; Burns all grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Roller Bar Grate.

Write to-day for Catalog and Prices.

Youngstown Furnace & Supply Company

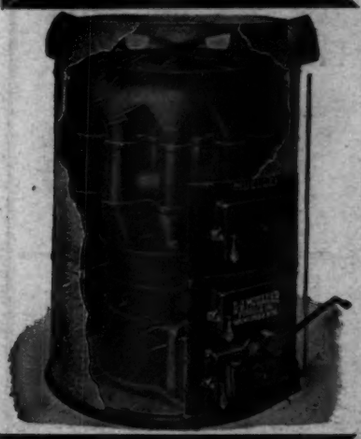
NILES, OHIO

Manufacturers of the Celebrated LION-APEX and BESSEMER Series of Furnaces.

Chicago Branch
218 East Lake Street

ROOD & McINTYRE
Kansas City, Mo., Southwestern Distributers

YOU MAY CLAIM YOU CANNOT SELL GOODS OF QUALITY—WE SAY YOU CAN



IT can be done by explaining to your customer why the article costs more than one of inferior make—show him where he is getting his money's worth for the higher price he pays.

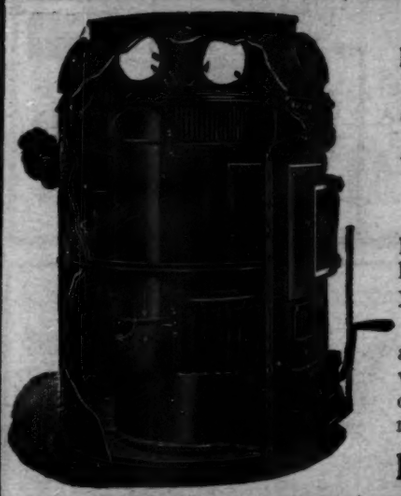
Apply this rule to your heating business by selling MUELLER Furnaces—explain that they are worth more than others because they are guaranteed to contain more direct heating surface than any other heater made, which means economy and power.

They are fuel savers—saving fuel saves money.

Durability is one of the MUELLER strong points—many MUELLER Furnaces having been in constant use for over 25 years, without repair and still giving good satisfaction.

L. J. MUELLER FURNACE COMPANY

Established 1857 — 191 Reed Street, Milwaukee, Wis.



ANY SIZE ANY STYLE

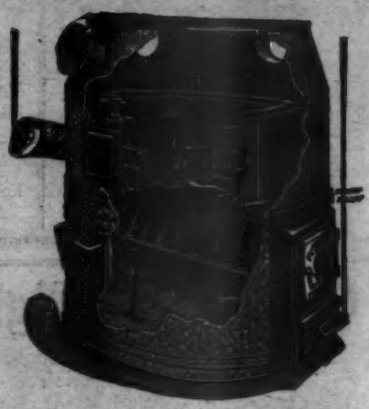
But Only One Quality—THE BEST

THAT IS WHY THE

FLORAL CITY FURNACES

have occupied the proud position of leaders in furnace construction for years.

For **durability, economy, power** and **satisfactory service,** this line is without an equal, and as long as quality is considered, it is sure to retain its place at the head.



Write For Our Latest Catalogue.

MONROE FOUNDRY & FURNACE CO., MONROE, MICHIGAN.

GOOD FURNACES

nowadays are those that heat correctly, give satisfactory service, that are easy to operate, save fuel, that are made of the best materials and exclude Gas, Dust and Smoke.

Your customers demand **Good Furnaces** and you surely want to furnish them with the best. **Ours are the BEST.**

Write for complete descriptive matter which will convince you.

Walter S. Rait & Co

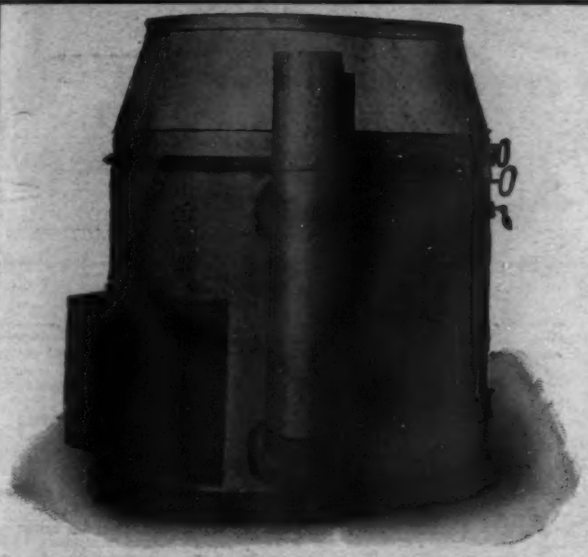
211-213 Lake Street, Chicago, Ill.

Sell The GILT EDGE Line
For 1909

Build a good reputation on a furnace that you can rely on. One that will stand up under all conditions of use. There is one such; it is the **GILT EDGE LINE.** Catalogs now for 1909 agency.

R. J. SCHWAB & SONS CO.
MILWAUKEE, WIS.

SCHWAB SIDEWALL REGISTERS.
TIN and GALV. IRON FITTINGS, Etc., Etc.



FORBES FURNACE—Rear View, Showing Cold Air Intake.

The 1908 Additions to the
Forbes Furnace
make it the
Season's Winner

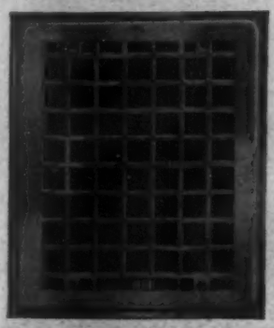
New Cast Iron Radiating Manifold
Ample Air Inlet and Deflector
Few Joints—Therefore Gas Tight
Burns Either Hard or Soft Coal
Fully Guaranteed in Every Case

Have You Seen Our Agency Proposition?

It's interesting—write us about it.

Tubular Heating & Ventilating Co.
228 Quarry St., Philadelphia, Pa.

Announcement! Wrought Steel



Floor or Wall

We announce that our Self-locking Glide Movement **Wrought Steel** Registers and Faces, as well as our New Semi-Steel goods, are made by us in our own Factory and under our exclusive patents.

A complete stock of all sizes on hand. Send for descriptive matter.

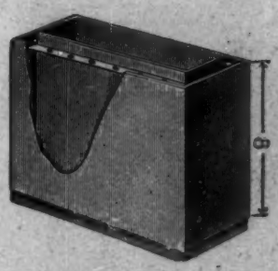
Tuttle and Bailey Manufacturing Company
New York Chicago Boston

$100 IN GOLD

FOR WINDOW DISPLAYS SEE PAGE 44

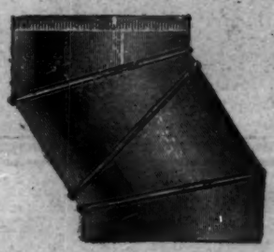
A Perfect Hot Air Furnace Pipe

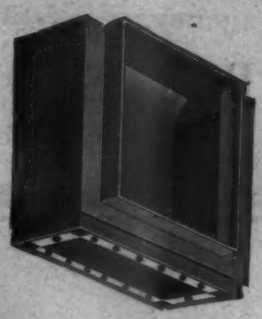
EASILY AND QUICKLY ERECTED



The Stiffest and Best Machine-made Pipe on the Market, and **the only Sectional Furnace Pipe in which the inner walls form the cross-walls.**

There are no wings to pull out and no cleats to bend. The joints fit perfectly and there is positively no buckling





This Pipe is the result of twenty-five years' experience and effort toward perfecting a Sectional Wall Pipe and is a complete success.

WRITE FOR OUR LATEST CATALOG

The Michigan Safety Furnace Pipe Company

Corner Brooklyn and Abbott Streets, DETROIT, MICHIGAN

WE ARE NOT CONNECTED WITH Any COMBINATION. DO NOT GET Our NAME CONFUSED WITH OTHER MANUFACTURERS

Simplicity, Durability, Economy and Capacity

All of which are essentials of the Really Good Furnace are featured in the

MONCRIEF

TOP RETURN FLUE WARM AIR FURNACE

In the MONCRIEF Furnace special attention has been paid to the little details, and efforts in that direction have not been wasted as they have assisted materially in making this a furnace which is unsurpassed for operation and durability.

FEATURES: Burns all grades of hard and soft coal; all cast iron; Moncrief Duplex Grate; large radiating surface; double fire-pot; large grate surface and cleanliness in use.

Write for Catalogue.

HENRY & SCHEIBLE CO.

825-29 Long Ave., N. W., Cleveland, Ohio

J. C. KIMMEL, 3314 E. 15th Street, Kansas City, Mo., Western Sales Agent.

Money Will Stretch

At least it will go further if spent in the right place. 50 Per Cent Saved by Our Big Offers. We can stretch your money and save you a full 50 per cent.

LOOK! Here are the most remarkable bargains in Magazine Clubs ever offered.

Regular Price Per Year
Cosmopolitan $1.50
Pearson's 1.50
Total $3.00
OUR PRICE $1.50

Regular Price Per Year
Cosmopolitan $1.00
Designer ..... .50
Total $1.50
OUR PRICE $1.25

Regular Price Per Year
Woman's National Daily $1.00
Paris Modes ..... .50
National Home Journal ..... .50
Total $2.00
OUR PRICE $1.00

Special Offers

Metropolitan Sunset or Bohemian can be substituted for Pearson's in this club.

Regular Price Per Year
Pearson's $1.50
Paris Modes ..... .50
Woman's National Daily 1.00
Total $3.00
OUR PRICE $1.50

Regular Price Per Year
Outing $3.00
Sunset 1.50
Total $4.50
OUR PRICE $2.25

Regular Price Per Year
Pearson's $1.50
Metropolitan 1.50
Sunset 1.50
Bohemian 1.50
Total $6.00
OUR PRICE $3.00

Outing or Smart Set can be included in any of the clubs at $1.50

Any two $1.50 Magazines in above Clubs will be sent to one or different addresses for only $1.50.

Paris Modes, the greatest woman's Magazine in the world, will be sent to any address one year for only 25 cents.

BIG BARGAIN CLUBS

Regular Price Per Year
Smart Set $3.00
Pearson's 1.50
Woman's National Daily 1.00
Total $5.50
OUR PRICE $2.75

Regular Price Per Year
World's Work $1.50
McClure's 1.50
Woman's Home Companion 1.00
Total $4.00
OUR PRICE $2.50

Regular Price Per Year
Cosmopolitan $1.00
Review of Reviews 3.00
The World Today 1.50
Total $5.50
OUR PRICE $3.00

Regular Price Per Year
Everybody's $1.50
Delineator 1.00
Total $2.50
OUR PRICE $2.00

Regular Price Per Year
American Magazine $1.00
Cosmopolitan 1.00
Total $2.00
OUR PRICE $1.65

Regular Price Per Year
Outing $3.00
Success 1.00
Total $4.00
OUR PRICE $2.00

Regular Price Per Year
National Home Journal ..... $ .50
Paris Modes ..... .50
Total $1.00
OUR PRICE 50c

PARIS MODES ..... 50c NATIONAL HOME JOURNAL 50c
and your choice of Pearson's, Metropolitan, Bohemian or Sunset, to one or more addresses for one year only $1.50.

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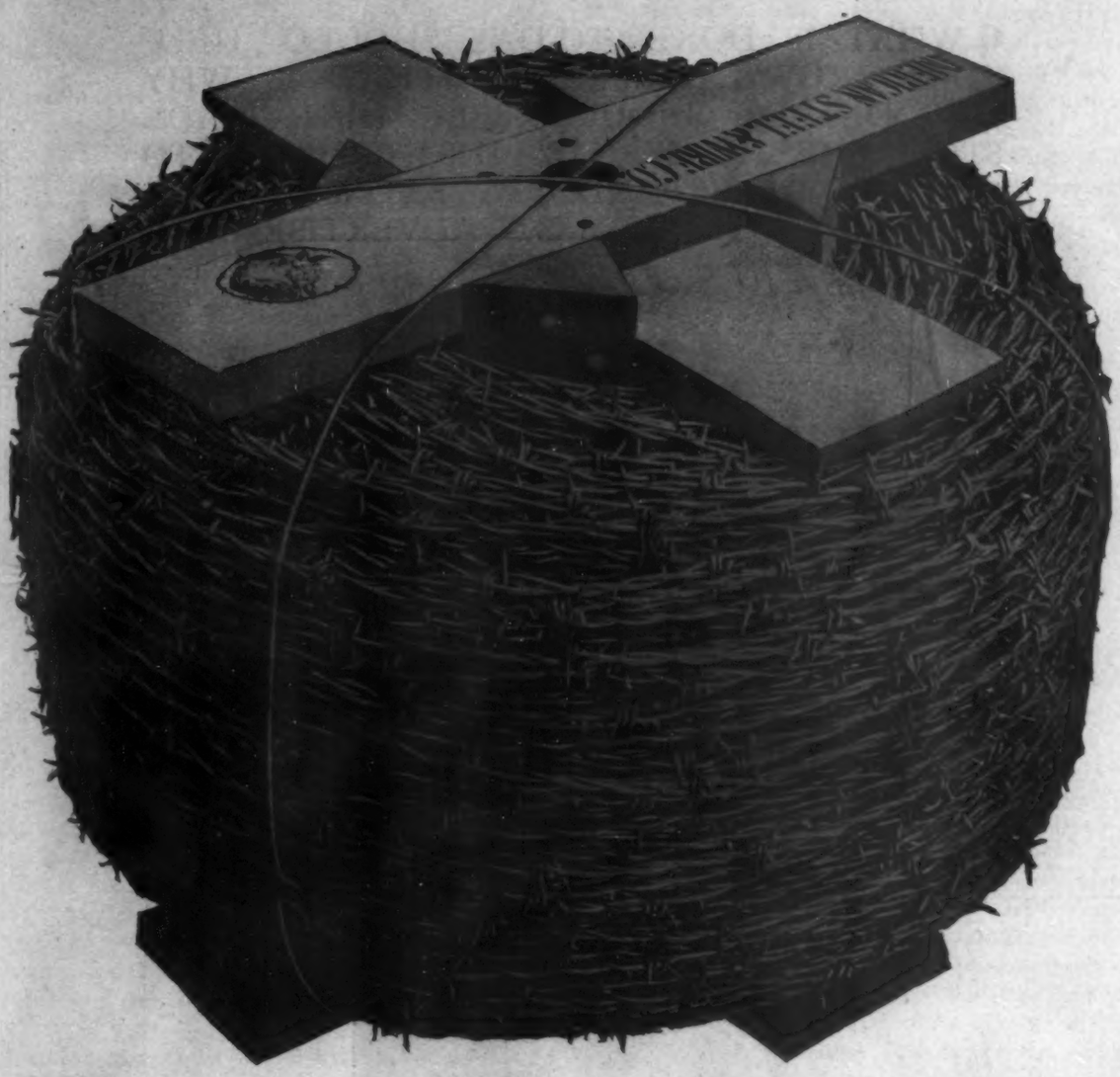

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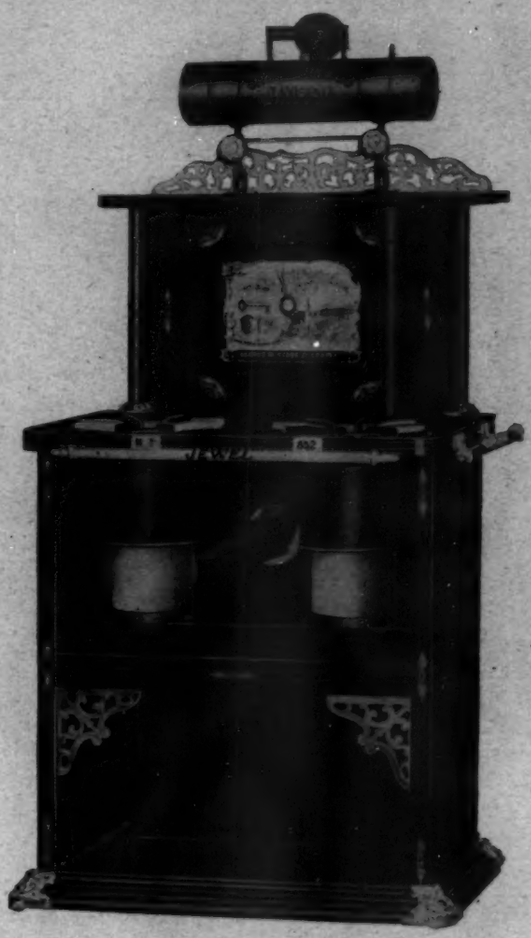

WRITE FOR CATALOGUE No. 74 AND GET THE JEWEL AGENCY.

George M. Clark & Co., Chicago,

DIVISION AMERICAN STOVE COMPANY

Jewels Are JUST Right

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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CHICAGO, DECEMBER 12, 1908.

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1908 TO NEW SUBSCRIBERS FOR THE YEAR 1909. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF 1909.

POSTMASTER-GENERAL MEYER is negotiating parcels post conventions with Cuba and Brazil. Similar conventions have been arranged with all South and Central American countries except Brazil.

THE production of gold by the mines of the United States during the calendar year 1907 is estimated to have been $90,435,700. The amount of gold consumed in the industrial arts during the year is placed at $37,596,254, of which $30,418,680 was new material. Production of silver was 56,514,700 fine ounces, of the commercial value of $37,299,700. The amount consumed in the arts was 24,293,939 fine ounces.

LEADING commercial movements within the country during October, as reported to the Bureau of Statistics, Department of Commerce and Labor, Washington, D. C., indicate on the whole no abatement in the upward turn of industrial activity disclosed by the returns for the previous month. Greater activity in the transportation field, as well as in the building trade of the largest cities, points to a marked improvement in the business situation of the country.

THERE will be no bill for the establishment of a government system of postal savings banks passed during the present session of Congress. Despite the announcement of the Republican policy favoring the postal savings banks, the administration will sidestep for the present and cause any kind of savings banks measure to go over until the Sixty-first Congress meets, on the plea that the government monetary commission is at work for reform financial laws and that the postal savings bank scheme would hamper its efforts. The bill is slated to undergo a series of setbacks and postponements.

A NOTABLE assemblage of representatives of the commercial interests of the country was held on December 10 at the Department of Commerce and Labor, Washington, D. C. It was the first annual session of the National Council of Commerce, which was organized early in the present year. About 100 delegates, representing sixty-five chambers of commerce, boards of trade and industrial bodies throughout the country attended the session. The fundamental idea of the organization is the promotion of the foreign commerce of the United States. It is expected that eventually the organization will establish permanent headquarters in Washington, which will be in touch with all of the great commercial and industrial interests, not only of this country, but of the world. Plans have been formulated looking to that end.

Child Labor and The Unions.

SPEAKING recently at a meeting held in Boston for the organization of the Massachusetts state child-labor committee, President Eliot of Harvard declared his positive belief that the rules of the labor unions in this country on apprentices are a drawback to the workers against child labor. In Germany, it was explained, not only is there a practically perfect system of trade schools but there is also a co-operative arrangement between the educational departments and the manufactories and the business concerns, so that children are watched and their education continued along industrial lines even after they are out of school.

The advantages of such an arrangement are obvious; it not only results in a much larger production of skilled workmen, but it also permits no interference with the early education of the persons who are to become skilled workers. The rules of the labor unions, however, make such an arrangement impossible in this country at present, for the unions keep a strict watch on skilled labor and they limit the number of apprentices to figures far below the requirements. This of course prevents boys and girls from obtaining instructions that would lead them to develop into skilled laborers. President Eliot thinks that perhaps the force of public sentiment may in time change this condition, since a tendency in this direction is already recognizable.

"I do not know," President Eliot said, "if there will be enough of this sentiment to secure the necessary legislation. There is a new and rapidly increasing interest in vocational education so called. All of that interest should be used to prevent the too-early use of the child in labor. There is another reinforcement that should aid this movement. I refer to sanitary science and preventive medicine, and every bit of it will go the way in which this society is moving. It is well known that children's health is injured, and so is that of many women, by labor; that it has a direct effect upon their physical being."

It might be suggested that, while legislation for something along the lines of the German system may

in time be secured, the labor unions will never repeal or modify or in any way liberalize their present apprenticeship rules so long as employers permit them to maintain the "closed shop." Once let there be organization among employers generally for maintaining the "open shop," and apprenticeships will be much easier than now to secure and many of the present evils of child labor will disappear.

Our Foreign Trade.

ADVICE to American manufacturers that they adapt their wares to Chinese tastes was made the other day in Chicago by an intelligent Chinaman from Hongkong in an address before a commercial organization. Germany and Japan have been supplying the wants of the orient because their manufacturers make the things the orientals want. In 1904 the United States consul-general at Hongkong wrote: "The American seller is too much inclined to insist that he knows the wants of the buyer better than the buyer does himself. Such methods of pushing trade may go somewhere else, but not among the Chinese." A consul in Puerto Cabello, Venezuela, in listing the "hindrances to Ameriman trade in South America" mentions not only the disposition of American traders "to force upon the customer something that he is not accustomed to," but also the practice of some American houses of allowing only thirty days for the payment of bills even on goods sent to remote interior points, their disinclination to furnish the patterns and assortments of sizes demanded in the South American market, the sending of commercial travelers who are unable to speak Spanish and the use of circulars printed in English. The vice-consul at St. Petersburg, in a recent consular report tells of a Russian importer's complaint that an American made desk came to him ruined because it had been packed only in a light wooden frame, whereas a similar desk from Germany had come in good condition because it had been well boxed.

If American manufacturers are to compete successfully for foreign trade they must make goods to suit the tastes of foreign customers. At home the manufacturers in many lines control styles and direct the national taste by means of wide-spread advertising. Such advertising campaigns, however, are practically impossible in the interior of South America or of China.

Ambitious Workingmen.

OVERFLOWING classes at the Franklin Union in Boston constitute one of the most encouraging signs of the times. The 500 applicants for membership in the evening school classes are evidence of a latent force in the industrial and commercial life of Boston which has all the essential qualities of ambition, courage, energy, determination, even to the point of self-sacrifice, and has lacked for development only the opportunity it has now found. Men seeking the advantage of these classes, even though it may add hours of study to their daily hours of manual or other labor, do not value life lightly. Labor is not slavery to them, nor work their doom. They know the possibilities that lie ahead. They are ambitious and confident in the power that is within them. In such men and in such spirit lies the surest hope of industrial and commercial progress.

There are thirty-three members in the class of shop formulae and industrial arithmetic. The class represents twenty-three different trades. When its members have completed its course they will have gained an insight into the economy of industrial organization. Whether they rise into positions as foremen or superintendents or managers, or continue as under workmen, they will have acquired a better knowledge of values, they will know how to prevent waste, and how to secure results with the least expenditure of money, material and energy. Their training will be an added asset in the industrial values of Boston. There are twenty-eight men, for instance, in the class of chemistry. Many of these desire to become pharmacists, but one, an iron worker, sees in chemistry the scientific equipment for higher service in his own trade. A confectioner believes that he can advance in his own business by means of scientific knowledge. There is hardly a trade which lacks its representative in the quest for greater knowledge and better equipment. Some of the applicants may be restless chasers after the butterflies of better luck, but to the majority can safely be accredited commendable motive as well as effort.

The initial success of the Franklin Union is evidence of the need which it supplies. The recognition of that need suggests that the public school system is failing to do all that it should in the education of youth. Many of the applicants for these evening classes are of high school age. Out of one class of thirty-three, it is reported that nineteen have had some training in the grammar schools. Evidently they left the public schools before they had finished the course, because of necessity, or because the course of instruction did not offer attractive value to them. Lack of appreciation of education cannot be charged to these young men. Nor are they to be accused of laziness or disregard for opportunity. In many cases, as in every industrial community, the public schools failed to give them what would be of greatest value in their vocations.

There is a growing belief among leaders in educational work that in the public school system there must be more substance in the training of the elementary schools and that supplementary to the elementary training there must be established courses of practical instruction which shall be of sufficient value to attract and retain the large percentage of pupils who now leave the public schools during or at the close of the grammar grades. The Mechanics' Arts High School in Boston and similar schools which have been established in a few other cities recognize this need, but meet it only in part. The Franklin Union also helps to remedy the defect. But it alone does not solve the problem that it suggests. If this latent force of ambition, ability and energy exists, waiting to respond to opportunity, is it wise for the public educational system to neglect it? How many more than the 500 applicants at the Franklin Union may there be who would increase their manual power by scientific instruction and who would add to their

productive capacity by supplementing skill with knowledge if the opportunity had been offered them?

The manner of vocational training in the public school system is not a simple problem. But the need of it is beyond question.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

Do the best you can at all times! That should be the motto of every young man who possesses ambition and the desire to make a name for himself in the world of business. If he does that at all times, he has put his foot on the first rung of the ladder that leads to promotion, and not before that time can he fairly say that he has begun to climb upward. Doing work in a half-hearted manner puts a decided handicap on a young man's future, for the moment that he regards his work as a grind, he is beginning to walk on thin ice that will precipitate him into dismissal from the service of the firm for which he is working; in truth, he places an obstacle in his path that cannot be surmounted. The difference between doing the best you can, and performing your duties in a half-hearted manner is easily seen, for the latter way of working cannot be disguised, as it has a false note that can be distinguished by the employer. The young man must make up his mind to give his entire attention to his work and not let it waver at any moment of the day, if he hopes to better his condition in the form of promotion. He must make it a point to do the best that he can whether the "old man" is there or not, for the "old man" has been through the mill, and he can easily tell whether all his employes are doing their best work or not. He cannot be fooled very long!

* * *

The unmitigated carelessness and indifference manifested by the management of many of the hotels of this country relative to the disposition of mail matter after the guests to whom such matter has been addressed have left a hotel and a town for some other, is very forcibly brought to my attention by a case of this kind, which is so far outside "the statute of limitations," that I cannot refrain from making mention of it. Way back on August 24 a letter containing correspondence of a highly important character was mailed by a business house in Chicago to one of its traveling salesmen who was then thought to be at Newark, Ohio. The letter was addressed in care of the Doty House in that town. When the letter had reached its destination (for "destination" it proved to be indeed and of a truth), the traveling man had left the Doty House and Newark for another town. The envelope in which the correspondence was enclosed was of a size technically known as No. 11. On the envelope in the upper left-hand corner instructions were printed in the largest possible type for the return of the letter to the Chicago firm in *five* days unless delivered to the person to whom addressed. The clerk of the hotel or whoever received the letter, evidently, through astigmatism of the eyes or obtuseness of the cerebrum, read the word *five* on the envelope for *fifty*, and then to be sure that his eyes had been properly deceived held it for about forty more days. The hotel man finally got tired of having the letter lie around as an ornament, and on Nov. 21—almost three months after the letter was received by him—took a tumble to himself and mailed it back to Chicago. I have heard about traveling men's mail having been allowed to lie around a hotel for a week or ten days without being returned in accordance with the instructions on the envelope, but this instance has all records of this kind in my experience, "beaten to a frazzle," as President Roosevelt would say. My uncompunctious friend of the Doty House had better wake up and "come out of it," or he will find that the traveling fraternity will get wise to his slip-shod methods and cease to patronize him. No traveling man should patronize a hotel which to all intents has so little regard for his precious mail as the Doty House at Newark, Ohio. If hotel people everywhere only realized to what extent a traveling man is inconvenienced by having his mail held up, I am sure they would pay more attention to this important feature of the hotel business.

* * *

At a certain large public library in this country, says an exchange, there is a rule, which ought not to be necessary, that men and boys must remove their hats on entering. One afternoon, when the room devoted to the circulating department was crowded, a man of middle age came in and took his place in line. He had a book or two under his arm, as if for the purpose of making an exchange, but he did not remove his hat. On the contrary, he had it jammed down well on his head, and there was a determined expression on his face that seemed to betoken a firm purpose not to take it off.

An attendant stepped to up him and quietly asked him to remove his headgear.

"No, sir!" he responded, in a loud voice. "You have no right to make a man take his hat off. This is a free country!"

"Certainly it is," rejoined the attendant; "but you can't get books at this library if you don't observe its rules."

"I'd like to know why not!"

"Because it's the rule. That is sufficient."

"You insist on my taking off this hat?" asked the man, in a still louder voice.

"Yes, sir. I do."

By this time the attention of everybody in the room had been drawn to the obstinate visitor.

"Well," he vociferated, "I'll take it off, if you insist, but I want you to understand I do it under protest."

He removed the offending hat, disclosing a head as bald as a billiard ball, with this inscription painted upon it in black letters that could be read twenty feet away: "Use 'Keen Kutter' Safety Razors."

And he was the observed of all observers for the next half hour.

* * *

This is what Dorothy Dorr terms " A logical conclusion." I presume the "deadly parallel" is intended for those of us who suffer from swelled head.

A LOGICAL CONCLUSION.

They who would keep their hands soft, sleep
With gloves on when they're in their beds;
Some men you meet, you'd think, must keep
In sleep their hats upon their heads.

News Siftings

The plant of the Indiana Mfg. Co. at Jeffersonville, Ind., manufacturers of hollowware, recently suffered a loss by fire amounting to $125,000.

The Stove Founders' National Defense Association will hold its annual conference with the Molders' Union on December 15, 16 and 17 in Chicago. A conference with the polishers will be held on December 18 and 19.

The Portsmouth Stove & Range Company, Portsmouth, Ohio, is now running to its full capacity and working both day and night men. The company recently received a large shipment of pig iron and a steady run throughout the winter is looked forward to.

Owing to the rapidly increasing business of the Chicago Stove Works, 22d street and Blue Island avenue, Chicago, and the increasing popularity of the celebrated "Gold Coin" stoves and ranges, the concern last week demolished their old cupola to make room for the erection of a larger one.

Geo. C. Pennell and Arthur F. Glaessner of the Union Stove Works, New York City, called at the offices of THE AMERICAN ARTISAN during the past week. Messrs. Pennell and Glaessner visited Chicago to attend to a number of business matters and incidentally to visit the annual exhibition of the National Commercial Gas Association at the First Regiment Armory, Chicago.

The Quality Stove & Range Co., Belleville, Ill., are calling the attention of the trade to their "Banner Quality" range which is handsomely designed, made of the best materials and guaranteed to be free from defects of any nature. The manufacturers state that it is selling rapidly because it can be depended upon at all times to cook and bake to perfection, the price being within the reach of all. When writing the Quality Stove & Range Co. kindly mention THE AMERICAN ARTISAN.

The Ward-Dickey Steel Company, Indiana Harbor, Ind., are sending out an attractive little folder treating of Dickey Patent Planished Sheet Steel, which has the imported Russia iron finish. A number of testimonials are printed on the folder from concerns who have used this celebrated sheet steel with very satisfactory results. This steel is made in gauges 18 to 28 inclusive; the regular sizes being 28 and 30 inches wide by 60, 72 and 84 inches long. The Ward-Dickey Steel Company will be pleased to make quotations upon specifications. When writing kindly mention THE AMERICAN ARTISAN.

The recent issue of the "Obermayer Bulletin," the monthly publication of the S. Obermayer Co., Cincinnati, Chicago, and Pittsburg, is as usual full of foundry information. Among the articles in it may be mentioned: "Save Part of What You Have Been Throwing Away," by R. H. Palmer; "The S. Obermayer Co.'s Chicago Plant" (illustrated); "Keeping Light Castings Straight," by H. N. Hallman; "The Right Way to Run a Foundry," by C. R. McGahey; "Building and Firing Large Ovens," by Maxwell Morton; "Bedding a Type Metal Melting Pot in the Floor and Weighting," by R. H. Palmer. The usual number of spicy paragraphs appear in the bulletin.

The Foster Stove Company, Ironton, Ohio, will open a branch house at Kansas City, Mo., on January 1, 1909. F. C. Tuttle will be in charge of the office. The Foster Stove Company's line of stoves and ranges is a very extensive one and is well known to the trade throughout the country. We bespeak for Mr. Tuttle a good share of the stove and range business that is procurable in such an important center as Kansas City.

Secretary George L. Woodburn of the Stove Salesmen's Association of Pennsylvania, is sending out a post card announcing that the annual reception and banquet of the association will be held at Lu Lu Temple, Spring Garden street, below Broad street, Philadelphia, on the evening of Wednesday, December 16. The regular monthly meeting of the association was held on November 27 at which Albert A. Conkey, Jr., New York City, representing the Yeager & Hunter Stove Co. of Spring City, Pa., was elected to membership, while the application of John H. Hobday of Philadelphia, representing the Dangler Stove Co., was referred to the committee. New officers of the association will be elected prior to the holding of the annual banquet on the evening of December 16.

PRODUCTS OF NICKEL PLATE STOVE POLISH CO.

The Nickel Plate Stove Polish Co., Chicago, guarantee their Black Jack Paste for domestic use not to be excelled by any other paste on the market. Black Jack Paste, for stove dealers' use, is a high-grade polish for new or old stoves. It can be reduced with water, and no benzine is required. The Black Eagle Stove Polish is put up expressly for the stove trade, and has been used for nearly twenty years, the makers say, by the leading stove manufacturers and dealers of the country. It may be used on either old or new stoves. The Black Eagle Liquid, put up for family use in 10-ounce cans, is a ready-mixed preparation of Black Eagle Stove Polish, and is especially adapted for use on Russia iron, stove pipe, etc. The Black Kid Liquid is put up in 10-ounce cans for family use. It is a ready-mixed preparation of Black Kid Paste. Black Kid Paste, for dealers' use, is a turpentine polish, and is specially adapted for use on sample stoves. It may be reduced with either benzine or gasoline. Peerless Aluminum Enamel may be applied to any surface. It has the finish of frosted silver and the manufacturers say that heat and water will not affect it. Being moisture-proof, it is of great value for use on exposed metal work, and is said to be unexcelled for enameling open plumbing work, radiators, steam and gas pipes, stoves, oven doors, structural iron work, picture molding, etc. Peerless Iron Enamel may be used on stovepipes, grates, registers, fenders, railings, etc., and for any purpose where a jet-black glossy surface is required. No injurious substances are contained, the makers say, in their Wizard Metal Polish, which is guaranteed to produce the brightest luster in the least time. Other products of the Nickel Plate Stove Polish Co. include Russian Asbestos Cement,

Russian Stove Putty, and Russian Roofing Cement. Descriptive literature may be had upon request, and when writing for it kindly mention THE AMERICAN ARTISAN.

EXHIBITS AT THE GAS APPLIANCE EXPOSITION.

The exposition which was given at the First Regiment Armory in Chicago during the past week by the National Commercial Gas Association was a very complete and comprehensive exhibition of gas appliances. The Armory was elaborately decorated for the occasion and the affair was well attended.

Geo. M. Clark & Company, Chicago, division of the American Stove Co., displayed a full line of "Jewel" gas stoves, gas heaters and water heaters. They are now introducing a line of all steel gas ranges and several of these were on exhibition. Some good things were shown in cabinets, elevated and double ovens and side broiler stoves. A demonstration was given every afternoon and evening while the exposition was on by three lady attendants who baked cookies which were given away to the visitors in neat little packages. Geo. M. Clark & Company's booth was continually surrounded by crowds who eagerly sought the cookies as they were removed from the gas-heated oven.

The Ringen Stove Co., St. Louis, division of the American Stove Co., were on hand with a representative line of "Quick Meal" gas ranges, water heaters and confectionery stoves. Their family size "Quick Meal" gas range was very favorably commented on by all who saw it at the company's booth. The display of cabinet and elevated oven gas ranges attracted a great deal of attention.

The exhibit of the Economy Stove Co. of Cleveland, Ohio, manufacturers of gas goods exclusively, was quite an elaborate one. The company showed a complete line of gas cooking appliances and water heaters. The "Real Economy" elevated ovens and broilers created a great deal of interest among visitors. The Economy Stove Co. claim to be the originators of the elevated oven idea and the company's representatives were constantly plied with questions thereon by all who visited their booth. Gas men were invited to register their names and addresses at the company's headquarters so as to obtain a souvenir in the form of a seal pocket book to be mailed from the company's office at Cleveland after the exposition had closed.

A feature of the extensive exhibit of Schneider & Trenkamp Co., Cleveland, Ohio, division of the American Stove Co., was an enameled cabinet "Reliable" gas range which was viewed and inspected with much interest. The company announced that this range would be given away at the close of the exposition. Schneider & Trenkamp Co. showed a comprehensive line of sanitary stoves with white enameled ovens. All the goods exhibited by them were new and created a great deal of interest. Thousands of "Reliable" pins were given away at the company's booth.

The Toledo Stove & Range Co., Toledo, Ohio, had on exhibition a new "Acme" gas range which they are just about to put on the market. The most important feature of this range is the burner supports on a steel rod, the simple yet improved way in which they are fastened at the top and the facility with which the range can be changed from natural to artificial gas, and vice versa. The company's "Acme Gem" gas range with ventilated oven is well known to the trade. The Toledo Stove & Range Co. believe that in their new product they have a range that will prove a ready seller immediately on introduction. It is devoid of artistic embellishment and is constructed on the "service" plan entirely.

The National Stove Co., Lorain, Ohio, division of the American Stove Co., showed a representative line of "Direct Action" gas ranges. The "Direct Action" gas range with broiler above and with independent broiling chamber, proved to be of special interest. Much interest also was centered about the oven of this range which is lighted on three sides. The company's exhibit was very favorably commented on and was pronounced to be one of the most elaborate at the exposition.

"Argand" gas ranges were exhibited in great variety by the Albany Foundry Co., Albany, N. Y. A number of these well-known ranges were given away and as a consequence the company's booth was continually surrounded by crowds of people. A useful little souvenir in the form of a nail file was given away by the Albany Foundry Co.

The exhibit of the Standard Lighting Co., Cleveland, Ohio, division of the American Stove Co., proved to be an excellent advertisement for "New Process" visible gas ranges. This range is termed "visible" from the fact that means are provided whereby the gas flame on three sides of the oven can be seen through the oven door. Representatives of the company were kept pretty busy explaining the good features of the "New Process" line.

THE OVEN OF THE "CROWN PRINCESS" RANGE.

The oven of the "Crown Princess" range, made by the Allen Mfg. Co., Nashville, Tenn., is one of the strongest features of this well-known range. It heats quickly and the heat is so sustained and so uniformly distributed that it will bake properly and evenly in any part. The walls are of 16-gauge steel, and are carefully braced to prevent warping. The bottom is seamed to prevent buckling, and will always stay level, according to the makers. The Allen Mfg. Co. state that particular attention has been paid to the weak point of the average oven—the side next to the fire. Here they have put an extra steel plate with heavy asbestos lining between it and the oven wall, thus providing ample protection against burning out the oven. The inside of the oven is aluminized, making an exceptionally neat and attractive finish and lighting up the interior. The oven has no dark corners to accumulate dirt and dust, and is easily kept clean. When writing the Allen Mfg. Co. for prices and descriptive literature kindly mention THE AMERICAN ARTISAN.

A little discourtesy is capable of destroying the effect that a hundred advertisements have created.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 32 to 37 inclusive.

Chas. P. Outhwaite has been appointed receiver for the Capitol Lock Nut & Washer Co. of Columbus, O.

With the exception of November, 1906, the past month was the heaviest in orders ever recorded by the American Steel & Wire Co.

Fire on November 27 did a damage of $8,000 to the plants of the Detroit Saw & Tool Works and Burr's Damascus Tool Works, both of Detroit, Mich.

The executive committee of the West Virginia Retail Hardware Association recently decided to hold the next annual convention at Charleston, W. Va., February 16, 17 and 18.

The Steel Fireproofing Company, of Kittery, Me., has been incorporated for $10,000 to manufacture fireproof building material. The incorporators are: H. Mitchell and S. J. Morris.

The plant of the Foster Brothers and Chatillon Company, Fulton, N. Y., manufacturers of machine and butchers' knives, was damaged by fire on November 30, though not seriously.

The Indiana Rolling Mill Company of New Castle, Ind., is now erecting a new shovel factory to replace that recently damaged by fire. It is expected that the plant will be ready for operation by January 1, 1909.

The Home & Office Novelty Company of Princeton, Ind., has been incorporated with a capital stock of $25,000 to manufacture an improved form of cuspidor, the invention of C. L. Snyder, president of the company.

The plant of the Wood & Vale Mfg. Company, St. Catharines, Ont., Canada, manufacturer of hoes, rakes, spades and other hardware specialties, was completely destroyed by fire on December 4. The loss is about $50,000.

W. H. Burn of the Sturges & Burn Mfg. Co., Chicago, makers of hardware specialties, was elected second vice-president of the Illinois Manufacturers' Association at the annual meeting at the Congress Hotel, Chicago, on December 8.

The Columbus Bolt Works of Columbus, O., announce that they carry a full line of bolts, bolt ends, rivets, lag screws, nuts, washers and carriage hardware. Their celebrated turn buckles, they say, are becoming more and more popular.

The G. M. Yost Manufacturing Company, Meadville, Pa., manufacturers of vises, have purchased a large milling machine and edging grinder, to take care of increasing business. The company are receiving numerous inquiries for their tools.

The Pittsford Metalware Company of Pittsford, N. Y., has been incorporated with a capital stock of $25,000 to manufacture metalware. The incorporators are: Henry H. Hilfiker, Joseph E. Byrne, Charles H. Rich, David N. Salisbury and J. D. Smith.

The United States Light & Heating Co. of New York City has been incorporated with a capital stock of $10,000, to manufacture lamps and appliances for lighting and heating. The incorporators are John L. Linehan, John Miller and Frederick Holman.

The Spargo Wire Cloth Company, recently incorporated at Rome, N. Y., to manufacture wire cloth of all kinds, will erect a factory 100 by 200 feet. One of the specialties of the new company will be wire mosquito netting, to be used in the Panama Canal zone.

The Ohio Gas Heated Flat Iron Co. of Canton, O., has been incorporated with a capital stock of $25,000. A plant will shortly be erected. The incorporators are C. A. Dougherty, Alfred H. Davies, Frank J. Groth, Chas. J. Loichot, Julius A. Balm, J. J. McCall, H. J. Sammon, S. F. Bowman and Louis E. Deuble.

Following are the officers of the Seattle Retail Hardware Dealers' Association, recently organized: President, W. D. Opdycke; vice-president, W. M. Olney; secretary, C. L. Moore; treasurer, B. F. Easterbrooks; executive committee, president, vice-president, treasurer, G. Rueger and William M. Curtiss.

The Baker-McMillen Co., Akron, Ohio, manufacturers of spirit levels, have constructed a new office building, 20 x 40 feet. They have a pleasant suite of offices with all modern improvements and labor-saving devices, and the factory capacity has been increased to utilize the room formerly occupied by their offices.

The Dane Manufacturing Company, Ottumwa, Ia., manufacturers of hay stackers, mowers, rakes, etc., is establishing a branch plant at Welland, Ont., where it has purchased 100 acres on which buildings will be erected. Two hundred men will be employed at the start. The Canadian branch is capitalized at $200,000.

A report has been received from an American consul on the East African coast in which he states that a prominent merchant in his district desires to be placed in communication with American exporters of saws and butt hinges. By writing the Bureau of Manufactures, Washington, D. C., and referring to File No. 2855, the address may be obtained.

The Lawson Mfg. Co., 40 Dearborn St., Chicago, report that they are doing a large business with their "Matchless" spring hinges. These hinges have been on the market since 1895 and the company states that since that time not one set has required repairs, which speaks well for the serviceability and wearing qualities of these well-known hinges. When writing the Lawson Mfg. Co. kindly mention THE AMERICAN ARTISAN.

A report, forwarded by an American consular officer in a city of southern Europe, states that a business man in that region desires to be put into communication with American manufacturers and exporters of screws and bolts, galvanized and tinned steel wire and steel. The consul is of the opinion that a good market exists for this class of goods. By writing the Bureau of Manufactures, Washington, D. C., and referring to File No. 2871, the address may be obtained.

Electra lightning rod cable and fixtures, manufactured by the Electra Lightning Rod Co., 220-240 Market St., Cresco, Ia., are said by the makers to be unexcelled by any goods of the character that are now on the market. Their cable is manufactured from

the best grade of copper, and is guaranteed to render efficient service. The company will be pleased to quote prices and to send descriptive literature. When writing kindly mention THE AMERICAN ARTISAN.

The Griffin Mfg. Co., 1500 Cherry St., Erie, Pa., report that they are doing a large business with their strap and "T" hinges, butt hinges, pressed steel shelf brackets and barn door hangers and track. Their planished steel strap and "T" hinges are made on automatic machinery and each is guaranteed to be as true as a die. The Griffin Mfg. Co.'s complete catalogue contains a full description of these goods. When writing for it kindly mention THE AMERICAN ARTISAN.

The Republic Metalware Co., Buffalo, Chicago and New York, announce increasing sales of their well-known "Savory" roaster. Such articles as roasters make good common-sense Christmas presents and the Republic Metalware Co. state that if a display of these roasters is made in a window it is sure to receive the attention of people that pass by the store, as it may be seen at a glance that the "Savory" roaster is an article of merit. When writing the Republic Metalware Co. kindly mention THE AMERICAN ARTISAN.

We have to thank E. C. Atkins & Co., Indianapolis, Ind., for one of their silver-steel compass saws, similar to those which were distributed among the hardware jobbers at the convention at Memphis in November. The saw is of exceptionally strong construction and possesses the qualities characteristic of the Atkins silver-steel line. The handle is nicely carved and the saw will be found to be a very useful tool. The occasion at which the saw was given away as a souvenir shows up very clearly on the blade. The box in which it was enclosed is triangular in shape and unusually attractive in appearance.

C. A. Peck, Berlin, Wis., secretary of the Wisconsin Retail Hardware Association, is sending out his regular bulletin which contains lots of good advice for the retail hardware dealer. Secretary Peck takes occasion to refer to the fact that the "Question Box" will be the most prominent feature at the next annual convention of the association which will be held in Milwaukee on Feb. 3, 4 and 5. He urges that members send to the secretary a question or two that they would like to hear "cussed and discussed" at the next meeting. The number of cranky, cross retail hardware dealers is, according to Secretary Peck, growing less every day.

J. M. Thompson & Sons Hardware Co., Owatonna, Minn., are sending out a large sheet announcing their seventh annual holiday sale and calling the attention of their customers to the numerous things in hardware that they are offering at special prices during the holiday season. J. M. Thompson & Sons Hardware Co. are among those retailers who issue catalogues at various intervals with profitable results. Their holiday sheet calls attention to the "Savory" seamless roaster, "Keen Kutter" scissors, shears and axes, "Stewart" stoves, Disston saws, "Mrs. Pott's" flat irons, the White Lily washing machine and other standard makes of articles in the hardware line.

GENUINE PHILADELPHIA LAWN MOWERS.

The Philadelphia Lawn Mower Co., Philadelphia, Pa., have issued a booklet showing their line of lawn mowers for the year 1909. In it Genuine Philadelphia lawn mowers are fully described and illustrated. Style "A" is made entirely of steel, and is light both in weight and draft. It has long and large bearings and is constructed especially for fine work. Style "E" is provided with removable box caps to take out the cutting cylinder without disturbing the frame, and it is easy to sharpen and repair. Like style "A" it is of light draft and is of simple construction and durable. In the construction of the "Golf" style the knife bar is set close to the ground to insure a close cut, and with its six blades leaves a fine, smooth lawn. Style "XX" is made in large sizes for in most cases it will be worked by two men, one to push and the other to pull with a rope. This does not mean, however, that one man cannot work it in ordinary lawn grass. Style "K" is, for all-round general purposes, one of the Philadelphia Lawn Mower Co.'s best style mowers. It has high wheels, runs light, and the five knives cut the grass smooth and even. Of the company's standard goods style "K" is very popular. Style "K" is also made with patent roller bearing on the revolving cutter journals. The roller bearings are of the best and give 1¼ inches of wearing surface, which is claimed to be more durable than the pin-point ball bearings. Style "C" is a medium high-wheel mower. It is constructed for fine work and with its increased height of wheels runs light. It is very popular for smaller lawns and private use. All the Philadelphia Lawn Mower Co.'s latest improvements are embodied in this machine. There are also described in the booklet styles "S", "T", "M", "All-Day", "Dewey", "Drexel", "Gold Coin" and "New" lawn mowers. The Philadelphia grass collector and Philadelphia lawn sprinklers are also described in the booklet. When writing The Philadelphia Lawn Mower Co. kindly mention THE AMERICAN ARTISAN.

A GLASS CUTTER WITH A TURRET HEAD.

The Goodell-Pratt Co., toolsmiths, Greenfield, Mass., have put on the market a line of glass cutters with turret heads which are said to be meeting with great success. The glass cutter, such as shown in the accompanying illustration, contains six cutters, each of which may be brought into play in turn as the others wear out. The Goodell-Pratt Co. assert that this is the most serviceable and longest-lived steel wheel glass cutter offered on the market today. When writing for prices kindly mention THE AMERICAN ARTISAN.

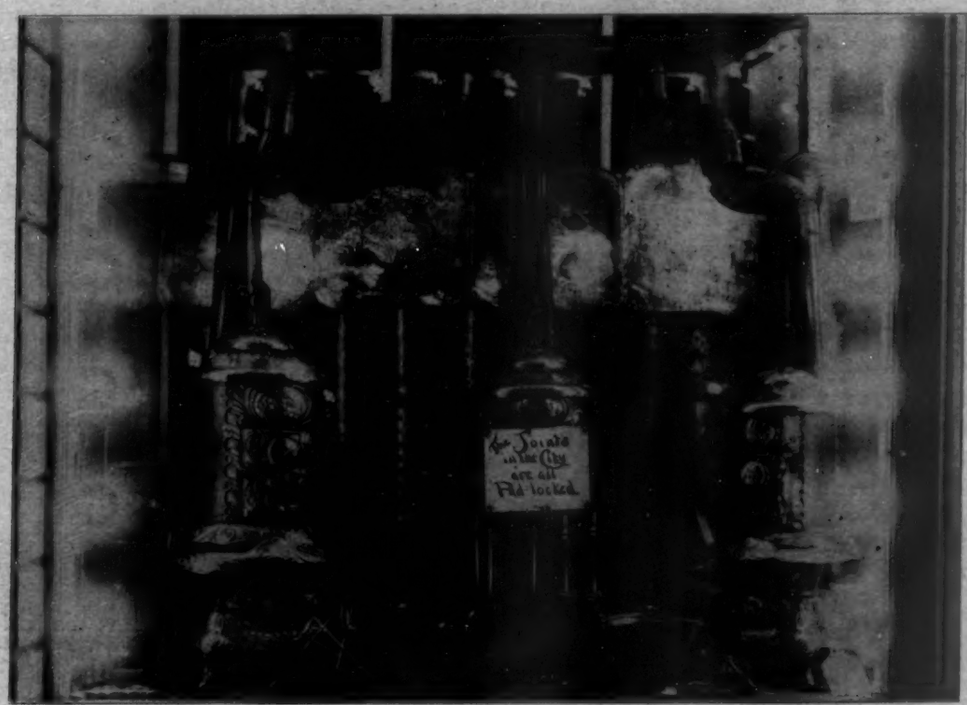
Turret Head Glass Cutter of the Goodell-Pratt Co.

AN ATTRACTIVE DISPLAY OF STOVES.

A window display that was honorably mentioned by the judges in THE AMERICAN ARTISAN'S hardware window display competition, was that made by Clyde W. Martin, manager of the Pierce Hardware Co., Salina, Kan. As will be seen from the illustration, stoves constituted the chief feature of this display, which, Mr. Martin says, attracted a great deal of attention and elicited much favorable comment. Mr. Martin described the display in the following manner:

"For the background six oil-cloth stove mats were rolled and placed on end, on the top of which stove-boards were placed. The three stoves were connected with one connection to the wall, and a few accessories to the heating stove business were added.

"In front of the center stove we placed around some joints of pipe a trace chain with padlocks put in the links, and then used the sign 'The Joints in the City Are all Pad-locked.' Our state being prohibition, the mayor of our town has ordered pad-locks placed on the doors of all 'joints.' "



Honorably Mentioned by the Judges in THE AMERICAN ARTISAN'S Hardware Display Competition —Submitted by Clyde W. Martin, Manager Pierce Hardware Co., Salina, Kan.

$100.00 IN GOLD FOR HARDWARE WINDOW DISPLAYS.

In answer to a question recently asked of him as to which form of advertising he would retain were he obliged either to dispense with his show windows or to abandon his very extensive advertising campaign in the daily newspapers, a leading retail merchant in Chicago replied: "I would very much rather cease advertising in the dailies than to pay no attention to my windows." Nor is this to be wondered at. How many more people pass your store every day than the number that read the daily paper in which your advertisement may appear? Why, many, many times more! And your window will receive the greater attention from persons on the street the more attractively the goods in it are displayed.

THE AMERICAN ARTISAN is offering $100.00 in gold for photographs of hardware window displays and descriptions thereof. Trim your window in as attractive a style as you can and enter THE AMERICAN ARTISAN'S contest.

A list of prizes to be awarded and the conditions governing the contest follow:

The Prizes.

The prizes will be awarded as follows:

First Prize, $50 in gold for the best photograph and description received of a window display of hardware.

Second Prize, $25 in gold for the photograph and description second in excellence.

Third Prize, $15 in gold for the photograph and description third in excellence.

Fourth Prize, $10 in gold for the photograph and description fourth in excellence.

The Conditions.

The conditions of the competition are as follows:

The photographs may be sent by mail or express, charges prepaid, and must reach this office not later than March 15, 1909. Address all photographs to THE AMERICAN ARTISAN Prize Competition, 355 Dearborn street, Chicago, Ill.

Each photograph and description must be signed by a fictitious name or device and the same name or device must be put upon a sealed envelope containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph.

Award of Prizes.

A competition committee of three will be appointed, one of whom will be an expert window dresser and one an experienced hardware man. This committee

will pass upon the merits of all photographs and descriptions received, without knowing the names or addresses of the senders, and will decide the winners of the contest.

THE AMERICAN ARTISAN reserves the right to publish all photographs and descriptions submitted in this competition.

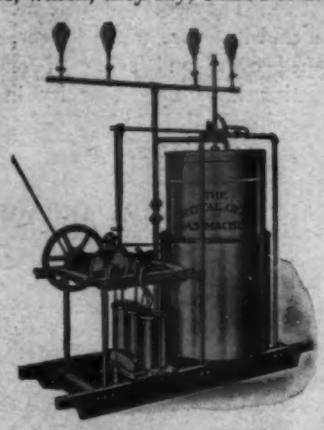
NEW "ELTON" DESIGN INSIDE DOOR SET.

The Taylor & Boggis Foundry Co., Cleveland, O., are calling the attention of the trade to their new "Elton" design inside door set which they are putting on the market. This design as shown in the accompanying illustration is made in both wrought steel and wrought bronze metal, and furnished in all finishes. The company anticipates that this design will be one of their best sellers. The Taylor & Boggis Foundry Co. can furnish the "Elton" design in cylinder front and vestibule door sets, bit key front and vestibule door sets, sliding door sets, mortise latch sets, push plate and buttons and flush sash lifts. The company has recently issued a circular in which this design is shown to advantage. When writing for it kindly mention THE AMERICAN ARTISAN.

"Elton" Design Inside Set.

THE "ROYAL GEM" GAS MACHINE.

The J. E. Whitacre Mfg. Co., Rockford, Ill., are sending out a circular describing their "Royal Gem" gas machine, which, they say, embodies all the requirements of a gasoline gas generator. The folder sets forth, as briefly as possible, the actual workings and results of this machine, which, the manufacturers claim, is perfect in every detail. The "Royal Gem" produces an even quality of gas, and the quality or temper of the gas, regardless of the number of lights burning, is absolutely controlled by adjusting the stroke on the gasoline injector, which is done in a very simple manner. An important feature of a gas producer is the pressure. The brilliancy of a gas light depends on the pressure as much as on the quality of the gas. Results from tests prove that high pressure consumes 50 per cent less gas than a low pressure to get the same quality of light. This feature of the "Royal Gem" gas machine, the makers say, is superior to that of any gas machine on the market, as any desired pressure may be produced. The "Royal Gem" is constructed upon principles that enable the J. E. Whitacre Mfg. Co. to build them in sizes to meet the demands of all—the smallest to the most palatial home, hotels, manufacturing establishments, etc. When writing the J. E. Whitacre Mfg. Co. for the circular descriptive of the "Royal Gem," kindly mention THE AMERICAN ARTISAN.



"Royal Gem" Gas Machine.

THE CHAUTAUQUA "POLAR STAR" BREAD MIXER.

Smith & Hemenway Co., 108-110 Duane street, New York City, publishers of the "Green Book of Hardware Specialties," are putting on the market a new article—the Chautauqua "Polar Star" bread mixer—which is meeting with as much popularity as their "Polar Star" ice cream freezer. The accompanying illustration shows one of these bread mixers. It has a triple kneader which is so constructed that with each revolution every part of the mixer to which dough might adhere is kept clean. The kneading is done by the large flexor in the center, and the two smaller flexors carry the dough forward to the center. By this means not only is the dough kneaded, but the ingredients are thoroughly mixed as well. An important feature of the Chautauqua "Polar Star" bread mixer is that it mixes from the side of the pan giving a leverage of from 10 to 1, which thus renders it easy of operation. It is the claim of Smith & Hemenway Co. that this device makes more palatable, more uniform and much better bread than any similar device now on the market, and that it saves its price in flour, time and labor. No solder is used on the inside of the mixer, every seam being turned by hand double so that

Chautauqua "Polar Star" Bread Mixer. (Arrow Points to Triple Kneader.)

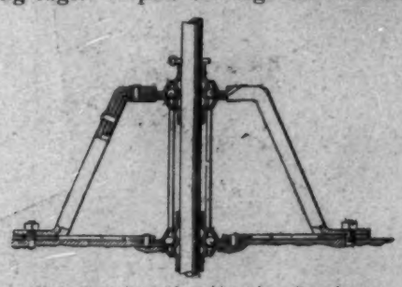
it is rendered absolutely water-tight. When writing Smith & Hemenway Co. for further particulars and prices, kindly mention THE AMERICAN ARTISAN.

A VERY FINE GRADUATED RULE.

The W. F. Robertson Steel & Iron Company, Cincinnati, Ohio, are distributing a very fine graduated six-inch steel rule which is enclosed in a substantial leather case and designed to fit the pocket. One edge of the rule is graduated in 1/32 and the other edge in 1/64 of an inch. The rule will be found very useful for all those who are called upon to make accurate measurements. It is one of the most useful souvenirs which have been brought to our attention. The company's name and address is engraved in first-class style on the back of the rule. When writing the W. F. Robertson Steel & Iron Company for this useful little souvenir kindly mention THE AMERICAN ARTISAN.

BEARING FOR WASHING MACHINE.

Jas. H. Knoll, Reading, Pa., manufacturer of the celebrated "Queen" washer, was on Dec. 1 granted a patent on a bearing for washing machines, which is shown in the accompanying illustration. Mr. Knoll filed the application for the patent on April 2, 1907. Combined with a support are a number of arms secured thereto and provided at their inner ends with depending lugs. A pair of rings have extensions se-



Patented Washing-Machine Bearing.

cured between the lugs. The inner walls of the rings are oppositely flared to provide a ball race. The channeled legs have their terminals bent in opposite directions and secured to the support and to the arms, respectively. There is a second pair of rings spaced from the first pair and provided with extensions secured between the flanges of the upper ends of the legs. The inner walls of the second pair of rings are also oppositely flared to provide a ball race. Sleeves extend through the rings and have their intermediate portions depressed to provide ball races. Bearing balls engage the two sets of races, and a shaft passes loosely through the sleeves. The number of Mr. Knoll's patent is 905,711.

"APEX" FENCE OF THE "SWINGING JOINT" CONSTRUCTION.

The Janesville Barb Wire Co. of Janesville, Wis., makers of barb wire, wire nails and woven wire fencing, report that they are doing a large business with their "Apex" fence of the "swinging joint" construction. The company advises that this fence is giving the most satisfactory results wherever used, and that its superior merits are earning for it a reputation that is resulting in very large sales. The Janesville Barb Wire Co. have issued a catalogue which fully describes the "Apex" fence and the "swinging joint" construction. It may be had upon request. When writing for it, kindly mention THE AMERICAN ARTISAN.

SELF-LOCKING GATE AND DOOR HOOK.

Covert's Saddlery Works, Interlaken, N. Y., are calling the attention of the trade to their self-locking gate and door hook, which, they say, is positively secure against being unhooked from the opposite side through a crack or narrow opening. The hook is of such construction that it cannot be lifted or unhooked by an animal. It can readily be attached to any door or gate. It is made in three sizes, 4, 5 and 6 inches, and plated with non-rusting metal. Covert's Saddlery Works say that they are the oldest and most extensive manufacturers in the world of trimmed neck yokes and neck yoke centers. They also manufacture specialties in saddlery, coach and general hardware. When writing Covert's Saddlery Works for further information concerning their self-locking gate and door hook, kindly mention THE AMERICAN ARTISAN.

J. E. WHITACRE MFG. CO. NOW OWN ROCKFORD HOG TROUGH CO.

J. E. Whitacre Mfg. Co., Rockford, Ill., manufacturers of sheet metal specialties and the celebrated "Royal Gem" gas machine, have purchased the business of the Rockford Hog Trough Co. of Rockford, which they will conduct in connection with their own business. The troughs of the Rockford Hog Trough Co. are made of galvanized Bessemer steel, with galvanized heads, and in all lengths. They are both bolted and soldered, leaving no cracks for disease germs to collect in. They cost but little more than the wooden trough and last very much longer. They are not easily tipped over, and being of exceptionally strong construction hogs find difficulty in wrecking them. When writing J. E. Whitacre Mfg. Co. kindly mention THE AMERICAN ARTISAN.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Bradgate, Ia.—Hugh McCreary has opened a hardware store.

Hawkins, Wis.—The Hawkins Hardware Co. is the name of a newly organized firm.

Bryan, Tex.—Notto Bros. have engaged in the hardware business.

Goshen, Ind.—Frank A. Osborn has opened a hardware store.

Pembroke, Ky.—McCarley Hardware Co. has recently been organized to engage in the hardware business.

Childress, Tex.—The Wright-Wilson Hardware Co. has been incorporated with a capital stock of $20,000.

Harrisonville, Mo.—Burch Bros. Hardware & Mercantile Co. has been incorporated with a capital stock of $30,000.

Hebron, Neb.—E. Tunks has opened a hardware store.

Spokane, Wash.—Lauer Bros. have opened a hardware store.

Economy, Ind.—Will Swain has engaged in the hardware business.

Denham Springs, Ia.—M. Kelly will engage in the hardware business about January 1.

BUSINESS CHANGES.

Medina, N. Y.—Acer & Whedon have sold their hardware business to Henry Curtis and D. W. Wilson. The business will be continued under the title of Curtis & Wilson.

Olathe, Colo.—A. R. Titus has purchased the stock of the Blairsburg Hardware Co. of Blairsburg, Ia.

Alma City, Minn.—I. M. Southwick has purchased his brother's interest in the hardware business.

Monroe, S. D.—The hardware firm of W. N. Ellis & Co. has been dissolved, W. N. Ellis succeeding to the business.

Neola, Ia.—P. J. White has purchased the hardware stock of F. J. West.

Cresco, Ia.—The Sobolik Hardware Co. has been succeeded by Sobolik & Peterson.

Glenville, Neb.—Jacob and Henry Hinrichs have purchased the hardware business of Adolph Binderup.

Filer, Idaho.—Triplett & Reynolds have been succeeded by the Filer Hardware Co.

Meridian, Idaho.—W. W. Graves has purchased the business of the Meridian Hardware & Implement Co.

Govan, Wash.—R. Watson has purchased an interest in the hardware and implement business of R. H. Fletcher.

Greenfield, Ill.—Silvester Melvin & Son have purchased the stock of the Arnett Hardware Co.

Wrightsville, Ga.—R. R. Martin has purchased the interest of J. W. Linder in the People's Hardware Co.

Cisco, Ill.—The hardware firm of Lemen, Skelton & Jefford has been succeeded by John Jefford & Son.

Newark, N. J.—Frederick Pollard has severed his connection with the hardware firm of Banister & Pollard, 206 Market street.

Graymont, Ill.—A. Welden & Son, hardware dealers, have been succeeded by A. Welden.

Waterville, Kas.—J. E. Hubbard & Sons have purchased the hardware business of J. B. Burtis.

Toledo, Ia.—E. G. Gard has purchased the hardware business of P. C. Jones & Co.

Kansas City, Mo.—T. W. MacFarlane has purchased the hardware business of W. R. Fleming.

Meriden, Kas.—Hines & Prentice have been succeeded by W. H. H. Bonebreak & Son in the hardware business.

Sun Prairie, Wis.—A. G. Scheuerell has purchased the hardware business of F. A. Tuschen.

Byron, Ill.—Wilbur Whitney and D. D. Emery have purchased the hardware business of Whitaker & Jewell.

Tama, Ia.—Johnston & Walz will succeed U. S. Johnston in the hardware business.

MISCELLANEOUS.

Sandpoint, Idaho.—The hardware store of Thomson Bros. was burglarized.

Rochester, Minn.—Jos. Devlin has sold out his hardware business.

Murdock, Minn.—F. W. Anderson is erecting a new building for his hardware business.

Savannah, N. Y.—The Wild's hardware store was damaged by fire.

Savannah, N. Y.—The hardware store of Austin & Meyers was damaged by fire.

Savannah, N. Y.—The Hadden hardware store was damaged by fire.

Cortland, N. Y.—The Bennett Hardware Co. has moved into its new building at 89 Main street.

Roxbury, Mass.—The hardware store of James McAuley at 2216 Washington street was damaged by fire.

Memphis, Tenn.—Orgill Bros. & Co., hardware dealers, suffered a loss due to fire.

Tiptonville, Tenn.—The Tiptonville Hardware Co. suffered a loss due to fire.

Aberdeen, S. D.—Hamilton Bros., 304 South Main street, will in the near future move their hardware stock to Wetonka.

Salesmanship is the fine art of knowing a thing thoroughly and telling it intelligently.

OBITUARY.

Edward F. C. Young.

Edward F. C. Young, president of the Joseph Dixon Crucible Co., Jersey City, N. J., and of the American Graphite Co., died at his home in Jersey City on December 6. Mr. Young had not been in good health for three years, but had been able to attend to business pretty regularly up to six weeks ago when serious complications developed.

Edward Faitoute Condict Young was born near Morristown, Morris county, N. J., on January 25, 1835. He was of English descent on his paternal side and his maternal grandparents were Scotch. Mr. Young went to Jersey City at the age of nine years. He started his business career in 1852 as a clerk in the Hudson County Bank. By dint of perseverance and close application to work he received promotion after promotion, and in 1865 he was appointed assistant cashier of the First National Bank of Jersey City. In 1879 he was elected president of the institution, a post he held continuously until his death. When the Joseph Dixon Crucible Co. became involved in financial difficulties Mr. Young was appointed receiver, and as a result of his great business ability the concern was in quick time placed on a paying basis. It is now one of the most successful industries in the state of New Jersey. When the receivership ended Mr. Young became president of the company.

Mr. Young was one of the best-known and most influential men in the state of New Jersey, having been largely interested in a score or more of business enterprises of an industrial and financial character. He was credited with being identified with more commercial concerns than any other man in the state. Besides being president, as already stated, of the Joseph Dixon Crucible Co. and the American Graphite Co., he was vice-president and director of the Acker Process Co.; president and director of the First National Bank of Jersey City; president and director of the Pavonia Trust Co. of Jersey City and of the North Jersey Land Co. He was also the controlling force of the New Jersey Title Guarantee and Trust Co. of Jersey City and the Bayonne Trust Co., of Bayonne, N. J. He was largely interested in other banking institutions and in a number of public service corporations, including the Consolidated Traction Co. The deceased was also very prominently identified with the political affairs of New Jersey, and was a member of the best clubs in Jersey City. Mr. Young married Miss Harriet Strober in 1853, who, with a son and daughter, survives him. Few men in the country were possessed of a greater amount of business ability than Edward F. C. Young and fewer still were more beloved by business associates and employes. Democratic in demeanor, strong in personality, he made friends wherever he went and retained them. The news of his death will be received with deep regret everywhere.

Don't imitate the ideas of your competitors. Go and see them and let them serve as ideas on which to improve.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The "special sale" advertisement of Ernwine's, Louisville, Ky., is in general an excellent one of its

kind. Suitable type has been used throughout and the ad shows up to good advantage. The use of prominent type for the reduced prices of pocket knives and razor hones is very commendable. The ad shown herewith is one that can be depended upon to produce good results, for apart from the fact that it is set up in a satisfactory manner, by reason of good presswork the ad has been rendered especially attractive. It appeared recently in a Louisville paper and occupied 5½ inches of space, two columns wide.

* * *

Here are four links in a chain of gold, which will bind you to success: Intelligent buying; good store arrangement; reason-why salesmanship; effective advertising. A chain is no stronger than its weakest link. You owe it to yourself—you owe it to your business to see that each of these four links is as strong as your best effort can make it.

* * *

The advertisement of J. B. Holterman & Co., of Martinsburg, Mo., in which are advertised "Round Oak" stoves and ranges, is in some respects a good ad. The text has been written in a very commendable manner and the good features of the "Round Oak" line are admirably set forth. The arrangement is also of a satisfactory character. A number of words in the ad have been misspelled, for which, of course, the printer is to be blamed for not having seen that the proof was read with greater care. The appearance also of quads in the matter calls for criticism of the printers' work. The cuts that appear in the ad are really its strongest feature and it is a pity that with such good illustrations, the printer apparently exercised so little care in setting up the advertisement. The type that has been used is old, and consequently, numerous broken letters appear in the ad. The exceptionally good cuts are in marked contrast with the worn-out type used in the body of the advertisement, which appeared in a recent issue of the *Martinsburg Sunbeam* and occupied 8¾ inches of space, five columns wide.

Heating and Ventilating

PRAISES THE WARM-AIR FURNACE.

To THE AMERICAN ARTISAN:

Recently there has been in THE AMERICAN ARTISAN a great deal about warm-air furnaces. I am glad to see it, for according to my way of thinking there is no way of warming a residence as satisfactorily as with a good furnace properly installed. It is often the case that furnace men make a mistake in trying to carry heat too far in a warm-air pipe. If they would use a hot-water radiator in such a room and dispense with the long tin pipe, their customers would be pleased, as they would have not only the most economical but the cleanest method of heating a residence, and the only method that gives or even pretends to give a constant supply of fresh air.

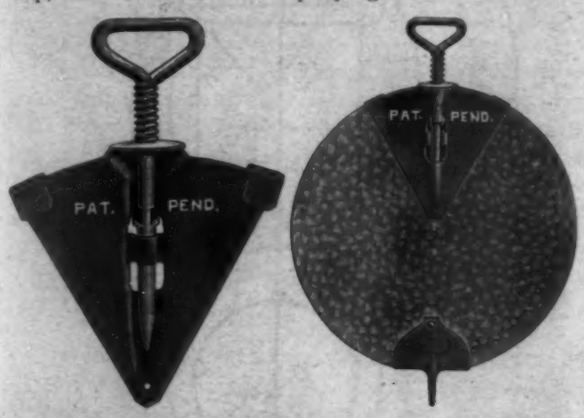
There is no doubt in my mind but what the death rate has been greatly increased by the use of steam and hot water in residences, or, in other words, by the lack of fresh air, as a furnace would give it.

Will some of your many readers tell where warm air furnaces were first made in the United States? Who made them? Of what material? How were they installed? Brick or with casings?

OLD TINNER.

THE "STERLING" NO-RIVET DAMPER CLIP.

The Sterling Foundry Company, Sterling, Ill., manufacturers of the "Best" line of hardware specialties, have put on the market the "Sterling" no-rivet damper clip, shown in the accompanying illustration. The



The "Sterling" Damper Clip and Damper Showing Clip Attached.

Sterling Foundry Company claim that this damper clip saves time and rivets. It can be put on the damper as quickly as the holes can be marked for the old style clip. Tail pieces are applied in the same manner as the clip, as is shown in the cut. When the clip is applied to the damper plate, if tin or light sheet iron, the point can be driven through by placing it on a pine board, or block, if heavy iron. A hole should be started with the corner of a chisel, the point driven through, and the lugs clinched and hammered down. For dampers over 10 inches in diameter the edge of the damper should be snipped off so that the shoulder of the clip comes flush with the plate. When writing the Sterling Foundry Company for prices kindly mention THE AMERICAN ARTISAN.

THE MICHIGAN SAFETY FURNACE PIPE.

The Michigan Safety Furnace Pipe Co. say that theirs is the only sectional furnace pipe made in which the inner walls form the cross walls. Advantage is claimed that in fitting and setting the pipe there are no wings to pull out nor cleats to bend as the pipe fits together perfectly and is sufficiently exact to secure perfect joining that will remain in position without any further fastening. The pipe made by the company is represented to be the stiffest and best finished machine-made pipe on the market. It is also claimed that it is the quickest and easiest to set up and that a large percentage of labor is saved in its use. When writing the Michigan Safety Furnace Pipe Co., corner Brooklyn and Abbott streets, Detroit, Mich., kindly mention THE AMERICAN ARTISAN.

PARAGRAPHS.

R. J. Schwab & Sons Co., Milwaukee, Wis., state that their "Gilt Edge" low-down warm-air furnace is among the most powerful soft coal furnaces made. This furnace will also burn hard coal or block wood. It is built for wear and has all the "Gilt Edge" features of construction. It is the aim of R. J. Schwab & Sons Co. to co-operate with their dealers to make each furnace sold an advertisement for him. Their catalogue may be had for the asking. When writing for it kindly mention THE AMERICAN ARTISAN.

The American Furnace Co., 1911-1915 Pine St., St. Louis, Mo., have erected a new factory in which they have installed new 13-ton riveting machines, with which riveting is done by pressure rather than by hammering. The company states that this insures all the joints of American furnaces being absolutely tight. The American Furnace Co. will ship to any responsible dealer in the country a sample furnace and if after a 30 days' inspection the furnace does not prove entirely satisfactory, it may be returned at the expense of the company. When writing the American Furnace Co. kindly mention THE AMERICAN ARTISAN.

Kellogg-Mackay-Cameron Co., Michigan avenue and Twelfth street, Chicago, are sending out their price-list No. 8 of boilers, radiators and heating supplies. It is a booklet comprising 60 pages and is designed to fit the pocket. It contains capacities, dimensions and price-lists necessary in designing or estimating any kind of heating work. To the architect or contractor requiring for ready reference data pertaining to modern appliances, it will be found invaluable. The book is profusely illustrated and is full of instructive tables. When writing Kellogg-Mackay-Cameron Co. for it, kindly mention THE AMERICAN ARTISAN.

To keep trade at home, place a large card in a prominent place reading, "If we haven't got it, we'll get it."

Forming the habit of being earnest with what one has to sell develops the habit of enthusiasm, and the enthusiastic salesman is generally a success.

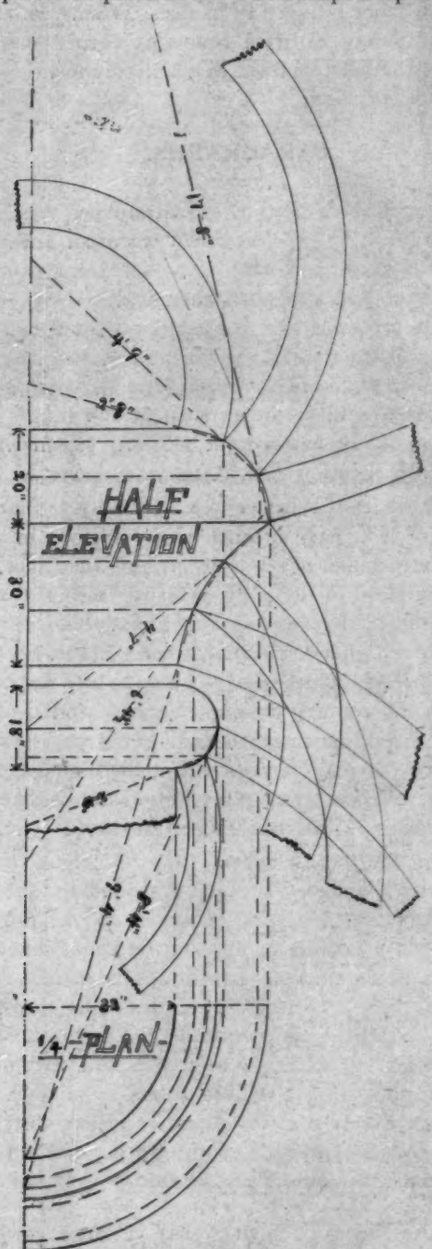
Tinshop

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1908 TO NEW SUBSCRIBERS FOR THE YEAR 1909. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF 1909.

PATTERN FOR BELL TOP AND BEAD OF 64-INCH STACK.

BY G. L. GRAY.

In answer to A. J. Getz of St. Louis, who in THE AMERICAN ARTISAN of November 28 asked for the development of patterns for a bell-shaped top and bead



Sketch of Pattern.

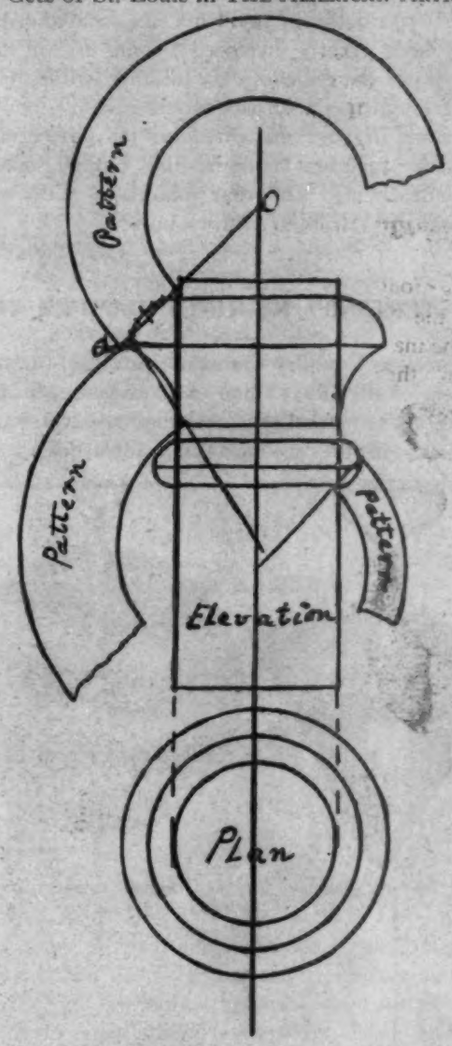
for a 64-inch round stack, as per his sketch showing the size and profile of top required, I submit herewith a drawing showing the development of the patterns for this top.

A half section is all that is required. The half elevation must be laid out full size, extending the center line far enough to receive all the radius points. The measurements given for the various radius lines are taken from scale drawing and should not be relied upon for patterns. After the various blanks have been made it still requires considerable skill to raise the various blanks to their corresponding sweeps as shown in ¼ plan. The blanks for the 30-inch section have to be stretched to the required curve, while the sections for the 18-inch bead and 20-inch section of top have to be raised to the required curve on the raising block.

PATTERN OF BELL TOP AND BEAD FOR TOP OF 64-INCH SMOKE STACK.

TO THE AMERICAN ARTISAN:

I am submitting herewith a pattern of a bell top and bead for the top of a 64-inch smoke stack asked for by A. J. Getz of St. Louis in THE AMERICAN ARTISAN of



Sketch of Pattern.

November 28. Draw the elevation, after which space off the curved outlines and lay off an equal number of spaces on the line *a o*, as shown. The pattern for the half round bead is obtained in two pieces. The length of the stretchout is determined on the arc described from *a*, and is equal to the circumference of a circle with a radius equal to the perpendicular distance from the point *a* to the vertical center line. Patterns for the

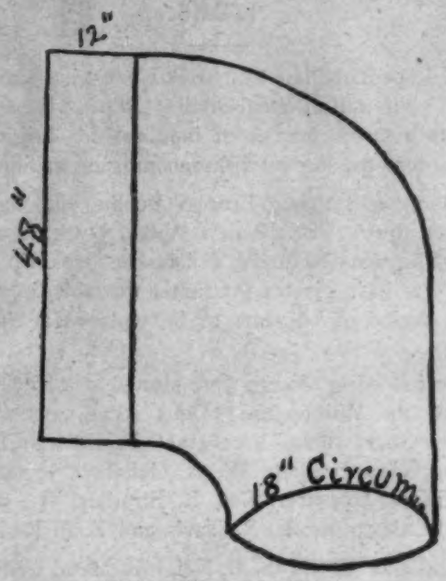
top are treated or formed in the same manner as for the zones of a sphere or ball. H. M.

Athens, Ga., December 2, 1908.

PATTERN WANTED FOR FIVE-PIECE ELBOW.

To THE AMERICAN ARTISAN:

We would like to be informed through the columns of your valuable paper, how to lay out a pattern for an



Pattern Wanted for This.

elbow 12 x 48 inches, square at one end and 18 inches in circumference at the other end, the elbow to be in five pieces. R. H. BINGHAM & SONS.

Sleepy Eye, Minn., Dec. 5, 1908.

WHO CAN ANSWER THESE QUESTIONS?

To THE AMERICAN ARTISAN:

We would like to learn through your valuable paper how long a 26-gauge galvanized iron standing seam will last. How long do you think a good tin will wear on a flat and pitched roof? What is your opinion about gravel roofing?

GOEDECKE & JONES.

Knapp, Wis., Dec. 7, 1908.

THE WAGNER PATENT ELBOW SHEARS.

The Wagner patent elbow shears, manufactured by C. DeWitt Wagner, Cedar Rapids, Ia., are guaranteed to cut rapidly, to make a clean cut, and to cut an accurate elbow. They are claimed to be very easy of operation and not liable to get out of order. The elbows are notched and folded before they are cut. The notching is done with one stroke or motion of the special curve circle snips, a pair being furnished with each outfit, together with a notching gauge for each size elbow. The shears are intended for any manufacturer or furnace dealer who makes his elbows, the price being within the reach of anyone who is doing an ordinary furnace business. They are sold in full sets or part, as the customer may desire. By the use of this device an elbow can be cut as quickly as one can be marked from a pattern. C. DeWitt Wagner also manufactures a slitting form that fits on any brake in place of the wood mold forms, and the same rotary shears that cut the elbows will slit light iron any length required. Descriptive literature will be sent upon request, and when writing kindly mention THE AMERICAN ARTISAN.

ARMOR-CLAD EDGERS AND FORMERS.

Armor-Clad edgers and formers, made by The Armor-Clad Mfg. Co., Canton, O., are general purpose tools, for edging and forming sheet metal up to 10 feet long. For edging and forming pipe, tubing, eaves trough, etc., they are said to be unexcelled. The Armor-Clad hand edger is made of high-grade iron, and machined its entire length, insuring good and true work. The edging bars being provided with slots to receive the metal, are secured to the body by means of standard machine screws. Each bar is provided with two slots, 3/16-inch and 5/16-inch deep, or the slots may be cut any depth to suit the work to be done, for rounded edges or wiring edges, etc.

The Armor-Clad former is made from gray iron and machined true its entire length. It is made adjustable to all sizes of bars up to its capacity. The manufacturers say that it is a strong and durable machine for all purposes, for tubing, piping, eaves trough, etc., and there is said to be no possible chance for it to spring.

The beading machine made by The Armor-Clad Mfg. Co., for eaves trough, etc., is made from machinery steel, properly slotted to receive three sizes of beading rods, and furnished with standards at a good working height. With each beader the company furnishes ½-inch, ⅝-inch and ¾-inch beading rods.

The company's power edger is of a Universal make, having edging slots cut on the outer surface of cold rolled steel shafting. For speedy work on conductor pipe and the like, it is said to be unexcelled. The Armor-Clad Mfg. Co. will be pleased to quote prices on these tools and to send on request literature descriptive of the same. When writing them, kindly mention THE AMERICAN ARTISAN.

APPRENTICESHIP AGREEMENT OF SHEET METAL CONTRACTORS' ASSOCIATION OF CLEVELAND.

The Sheet Metal Contractors' Association of Cleveland, O., at a recent meeting of that association accepted the report of the committee on apprenticeship and adopted the apprenticeship contract drafted by the committee. For months past the committee had been working on the apprenticeship question and as a result of their efforts both the committee's report and the apprenticeship contract recommended by them have been printed to be distributed among the members of the association and among the trade. The report of the apprenticeship committee is as follows:

"Your Apprenticeship Committee has, after considerable time and study, come to the conclusion that a sufficient number of good and competent mechanics can be assured only through a proper apprenticeship system; this system should not only give a boy a practical, but also a technical knowledge of the trade. With this object in view, the committee recommends to the members of our association the universal adoption of the accompanying form of the apprenticeship

agreement, which should be entered with the boy's parents or guardians, as the case may be.

"In addition to the carrying out of the general terms of this contract we would recommend that the following rule in the employment of the apprentice be followed out, as near as the individual case in hand may permit:

"1. No apprentice shall be engaged under 16 years of age, and none but boys who have at least passed the seventh grade of our public schools.

"2. Care should be taken to employ none but boys of good moral character and reasonably good physique.

"3. We believe in the compulsory study by the apprentice of such courses as are now available in the Young Men's Christian Association or our present new Technical High School. We believe that the employer should encourage such study on the part of the apprentice by bearing the financial expense of same. We have taken the matter up with the officials of the Young Men's Christian Association and have attached to this report a written statement from them as to what can be done in this line.

"4. With the above careful selection of the quality of a boy for apprenticeship, we believe that the wages paid should be sufficient to attract such boys to the trade, and we believe that the employer would be amply repaid by the efficient services rendered under this system. We therefore recommend as follows that the wages be fixed at:

First year	$5.00 per week
Second year, first half	5.50 per week
Second year, second half	6.00 per week
Third year, first half	6.50 per week
Third year, second half	7.00 per week
Fourth year, first half	8.00 per week
Fourth year, second half	9.00 per week

"The above to be the minimum wages fixed in the contract.

"The employer should be allowed, however, to reward particularly good services on the part of the apprentice, by additional compensation. The employer should create a fund, out of which should be paid the apprentice at the expiration of his contracted term of apprenticeship, a sum of equal to $1 for each week worked of his contracted term of apprenticeship, at which time his employer shall issue to him a journeyman's certificate, in which the employer shall set forth the time served.

"Your committee believes the carrying out of the above recommendations and the systematic employment of a goodly number of apprentices each year will, in course of a few years, solve our vexing labor problem and supply our membership at all times with not only a sufficient number of workmen, but with a force of men highly proficient in their trade and who will at all times be a credit to themselves and their employer and who will command the respect of the public.

"Respectfully submitted, A. E. Riester, chairman; E. F. Aunger, H. H. Lind, J. S. Harrison, G. J. Wehrly, Committee on Apprenticeship."

NOTES AND QUERIES.

"SPRUNG" WASHING MACHINE.

From John Black, 159 Ninety-second Street, Chicago, Illinois.

Who makes the "Sprung" washing machine?

Ans.—American Mfg. Co., Lockland, Ohio.

"LEADER" HAY CARRIER.

From C. F. Smith, De Kalb, Illinois.

Who makes the "Leader" hay carrier?

Ans.—Milwaukee Hay Tool Co., Milwaukee, Wis.

KITCHEN CABINETS.

From M. A. Mawhorter, Albany, Indiana.

Kindly give me the names of some manufacturers of kitchen cabinets.

Ans.—Argos Mfg. Co., Argos, Ind.; Bosse Furniture Co., Evansville, Ind.; Greencastle Cabinet Co., Greencastle, Ind.; Hoosier Mfg. Co., New Castle, Ind.; Chas. A. Hubbard, Martinsville, Ind.; G. P. McDougall & Son, Indianapolis, Ind.; Jefferson Mfg. Co., Jeffersonville, Ind.; Kankakee Mfg. Co., Kankakee, Ill.; Marysville Cabinet Co., Marysville, Ohio; Niemann & Weinhardt Table Co., 392 N. Wood St., Chicago; Quality Cabinet Co., Indianapolis, Ind.; Ranney Refrigerator Co., Greenville, Mich.; Spiegel Cabinet Co., Shelbyville, Ind.; Vincennes Furniture Mfg. Co., Vincennes, Ind.; Wabash Cabinet Co., Wabash, Ind.

ITEMS.

The Pope Tin Plate Co., of Pittsburg, has started up its tin plate mill at Steubenville, Ohio. The company reports a large number of inquiries for bright plate and orders coming in with encouraging rapidity.

Follansbee Banfield Process Roofing Tin has been used on the roof of the new Wilkes block, Louisville, Ky. The manufacturers, Follansbee Bros. Co., Pittsburg, Pa., have given a guarantee that this tin will last for a period of 15 years or be replaced at their expense.

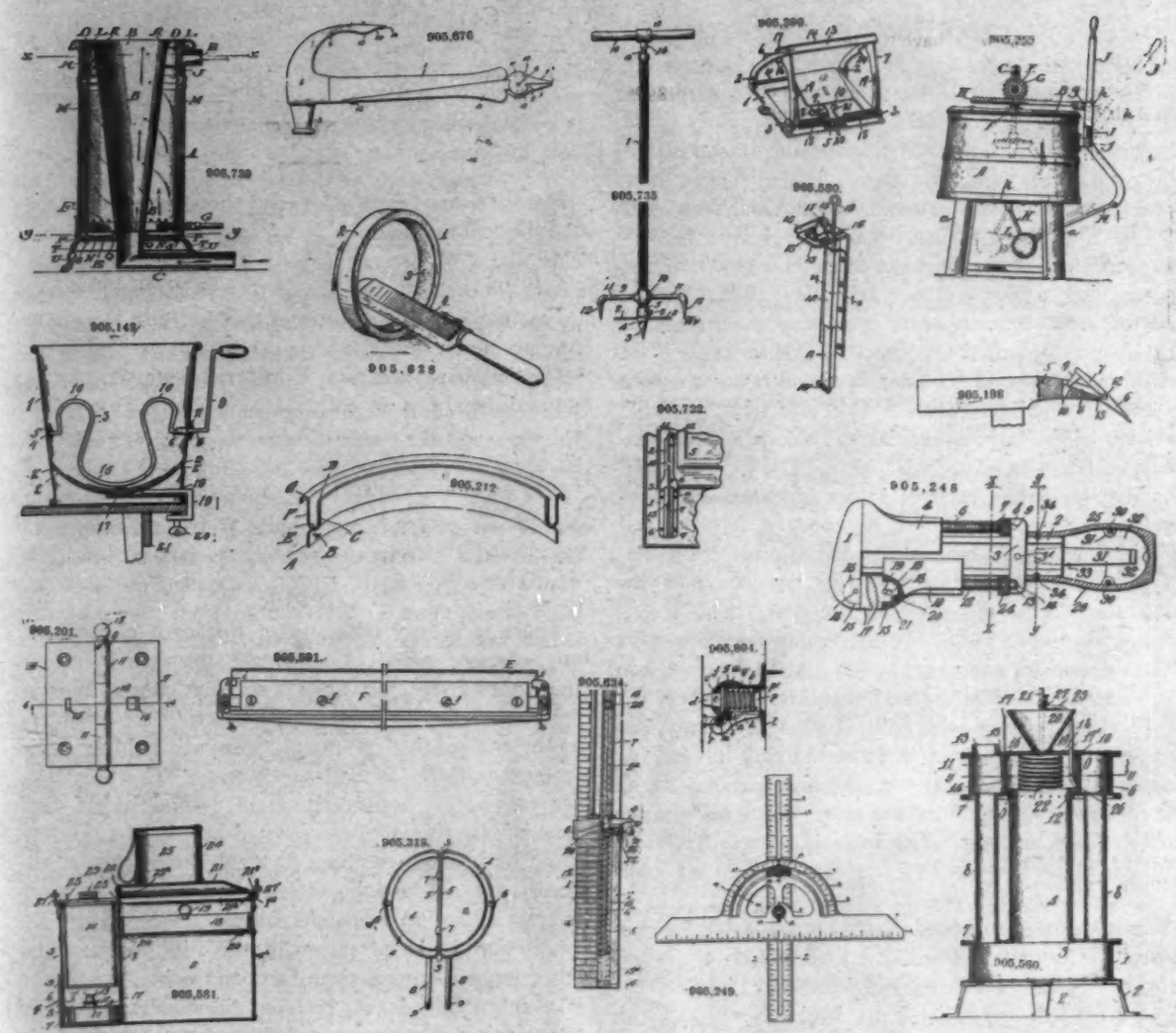
The following officers were elected at a recent meeting of the Wilmington (Del.) local association of Master Sheet Metal Workers: President, Chas. H. Blaine; vice-president, W. A. Gallaher; secretary, S. E. Harpel; treasurer, Geo. L. Stradley, Jr.; trustees, W. H. Alexander, E. R. Davis and Z. F. Rudolph.

Catalogue "D" of the S. Keighley Metal Ceiling and Mfg. Co., Pittsburg, Pa., contains a full description and numerous illustrations of the company's celebrated lock-joint metal ceilings. These ceilings have handsome panel effects and the joints are guaranteed to be absolutely dust-proof. The company will be pleased to submit special designs on request. When writing for their catalogue "D" kindly mention THE AMERICAN ARTISAN.

At a recent meeting of the master sheet metal workers of New Orleans, La., the Master Sheet Metal Workers' Association of New Orleans was organized with these officers: President, T. A. Greer; vice-president, W. Tinckler; secretary-treasurer, J. B. Ibos. In due course of time the association will affiliate with the national association. Constitution and by-laws are now in course of preparation and is being looked after by a committee, of which J. B. Ibos is chairman. The New Orleans local proposes to hold semi-monthly meetings.

In announcing the name of A. R. Pritchard of Rochester, N. Y., as general manager of the reorganized Lisk Mfg. Co. of Canandaigua, N. Y., we are requested to say that it will not affect his interests as vice-president of The Pritchard-Strong Co., nor will this change have any bearing on the policies of The Pritchard-Strong Co. and The Lisk Mfg. Co., the former of which markets its goods through the wholesale and the latter through the retail trade. The conduct of each business will be entirely separate and independent of the other. Mr. Pritchard's long experience in the sheet metal goods business fits him in a special way to be of assistance to the Lisk Mfg. Company at this time, and his assumption of added responsibility will in no way lessen his interest in the other enterprises with which he is connected.

NEW PATENTS.



905,148—Bread Mixer. John B. Collins, Jamestown, N. Y., assignor of one-half to Charles M. Purdy and Frank A. Smiley, Jamestown, N. Y. Filed Jan. 8, 1907. Serial No. 351,393.

905,198—Hammer or the Like. Andres G. Lundin, Neponset, Mass. Filed June 3, 1908. Serial No. 436,414.

905,201—Hinge. James Magnusen, Chicago, Ill. Filed Oct. 14, 1907. Serial No. 397,252.

905,212—Cooker. Albert W. Morrell, Campbell, Cal., assignor to the California Fireless Cookstove Co., Campbell, Cal. Filed April 18, 1908. Serial No. 427,882.

905,248—Combination Tool. Isaac N. Tower, Cheneyville, La. Filed June 8, 1908. Serial No. 437,412.

905,249—Combination Tool. Nathan Townsend, Lodi, Cal. Filed Jan. 3, 1908. Serial No. 409,124.

905,253—Mechanical Movement for Operating Washing Machines. William H. Voss, Davenport, Iowa. Filed March 14, 1908. Serial No. 421,246.

905,318—Skillet. Edward A. Hudson, Oquawka, Ill. Filed Dec. 16, 1907. Serial No. 406,752.

905,390—Animal Trap. Chauncey B. Trumble, Syracuse, N. Y., assignor to Oneida Community, Limited, Oneida, N. Y., a corporation of New York. Filed April 29, 1907. Serial No. 370,904.

905,560—Heater. William L. Moore, Humboldt, Tenn. Filed Nov. 9, 1907. Serial No. 401,505.

905,580—Sash Balance. Edward J. Reilly, Eganville, Ontario, Canada. Filed March 21, 1908. Serial No. 422,544.

905,581—Dinner Pail. Melvin T. Rhea, Emlenton, Pa., assignor of one-half to Henry C. Heeter, Callensburg, Pa. Filed June 13, 1907. Serial No. 378,819.

905,591—Lawn Mower. Thomas Rowe, Wynnewood, Pa. Filed June 23, 1908. Serial No. 439,972.

905,634—Window Screen. John M. Beahan, Hancock, Mich. Filed July 21, 1908. Serial No. 444,578.

905,638—Knife Sharpener. Anton von Beust, Orange, N. J. Filed Feb. 11, 1908. Serial No. 415,365.

905,676—Hammer. John G. Evans, Phœnix, Ariz. Filed Feb. 16, 1906. Serial No. 301,437.

905,722—Combined Drop Door Hinge and Brace. Charles W. Listerman, Covington, Ky. Filed Dec. 17, 1908. Serial No. 348,342.

905,735—Post Hole Auger. William J. Miller, Buffalo, N. Y. Filed Jan. 24, 1908. Serial No. 412,486.

905,739—Gas Stove. Philip Nehlig, Philadelphia, Pa. Filed June 14, 1907. Serial No. 378,969.

905,804—Door Stop. Daniel A. Fies, Reading, Pa., assignor of one-half to Adam Rothermel, Reading, Pa. Filed March 21, 1908. Serial No. 422,394.

Trade Report.

HARDWARE.

While there have been no particular features of moment to report in connection with the hardware market during the last week, business continues to be reported as fairly active, considering the season of the year, and prices hold to a steady basis. There have been some revisions of quotations here and there, but they have not been radical. There has been a moderate movement of seasonable goods, as a result of the approaching colder weather and the holiday season, and the better tone apparent is causing a more liberal purchase of goods. Of course, inventories will be taken at the close of the month, and this has to some extent curtailed purchases. The talk of a probable revision of the tariff schedules has also had some sentimental effect at least on business. The local demand for wire nails has been of rather a spasmodic character. For cut nails there has been a fair demand within the actual requirements of the trade. The demand for barb wire is somewhat in excess of the usual volume at this time of the year. The shovel market continues to show considerable irregularity as far as prices are concerned. The market for cast iron hardware presents rather an irregular appearance.

The base price of wire nails at the mill is $1.95 per keg. The jobbing price is $2 at the mill for full car loads, $2.10 at the mill for less than car loads and $2.40 out of store. The base price of cut nails at the mill is $1.80 per keg. The jobbing price is $1.85 for full car loads at the mill, $1.95 for less than car loads at the mill and $2.25 out of store.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' car load lots, $1.95; retailers' car load lots, $2; painted barb wire, jobbers' car load lots, $2.10; retailers' car load lots, $2.15, with 30 cents for galvanizing; plain wire to jobbers in car load lots, $1.80, and to retailers in car load lots, $1.85.

TIN PLATE.

The tin plate makers are running their plants at about 55 per cent of capacity. The salmon packers are the largest consumers of tin at this date, and their requirements are now well under contract. The American Sheet & Tin Plate Co. started 25 of the mills at its Nashville plant this week. The year in tin plate on the whole has been a favorable one. Prices are $3.89 for 100-pound coke plates f. o. b. New York, and $3.70 at Pittsburg mills, with the independents quoting $3.65.

Am. coke tins, I. C., from store, New York:	
Bessemer steel, 107 lbs., 14x20	$4.35@4.40
Bessemer steel, 100 lbs., 14x20	4.20@4.25
Bessemer steel, 95 lbs., 14x20	4.10@4.15
Bessemer steel, 90 lbs., 14x20	4.00@4.05
Am. charcoal terne, 8-lb. coating:	
Worcester grades, 14x20, 107 lbs	4.30@4.35
Worcester grades, 14x20, 100 lbs	4.15@4.20
Worcester grades, 20x28, 200 lbs	8.05@8.10
For prompt shipment, f. o. b. mill:	
Coke, tins, 14x20, I. C	3.85@3.90
Coke, tins, 14x20, 100 lbs	3.70@3.75
Coke, tins, 14x20, 95 lbs	3.65@3.70
Coke, tins, 14x20, 90 lbs	3.60@3.65
Charcoal, terne, 20x28, I. C	7.30@7.35
Charcoal, terne, 20x28, 200 lbs	7.00@7.05

Usual difference for odd sizes and weights.

SHEETS.

The sheet market is quiet, and though there is considerable contracting for future requirements, little is being done at present beyond supplying immediate needs. There is a fair demand for corrugated sheets for roofing and other purposes, but business generally is by no means heavy.

The following are New York prices for 500-bundle lots and over, f. o. b. mill:

No. 30	$4.05
No. 29	3.80
No. 28	3.65
No. 27	3.35
Nos. 25 and 26	3.15
Nos. 22 and 24	2.95

COPPER.

There is a very dull market for ingot copper, the only changes noted being in the speculative figures given out by the New York Metal Exchange. Bids of 14½ cents for Lake are reported to have been recently refused by producers, who are holding their product as firmly as ever at 15 cents. The only copper moving is apparently from second hands, and most of the transactions reported are due to manipulation by traders who hope to break the market. Producers are not pressing sales, though there is more interest being taken in electrolytic, owing to the renewed activity being shown by the Westinghouse and other large electrical manufacturing concerns. There is a sharp line drawn between those who believe in lower prices for copper and the element which maintains that the metal is in a very strong position intrinsically, and it will take time to prove which is right. The present dullness prevents any correct analysis, and it is difficult to decide between the conflicting interests. The London market shows a moderate decline for the week of £1 2s 6d on spot and £1 1s 3d on futures. Sheet copper is firm, the base price being 19 cents. Yellow metal is firmly held at the recent advance, the quotations being 18 cents for dimensions, 16 cents for sheathing and sheathing nails, 17 cents for slating nails and 18 cents for keel and stem metal. Seamless brass pipe is very firm at the recent advance, the quotations being as follows: ⅛-inch, 27 cents; ¼-inch, 26 cents; ⅜-inch, 21 cents; ½-inch, 20 cents; ¾-inch to 3-inch, inclusive, 19 cents; 3½-inch, 20 cents; 4-inch, 21 cents; 4½-inch, 23 cents; 5-inch, 25 cents; 6-inch, 36 cents.

Extreme fluctuations for this year:

	Highest.	Lowest.
Lake copper, spot	15	12⅝
Electrolytic copper, spot	14⅝	12¼
Casting copper, spot	14¼	12½
London, spot	£64 17 6	£56 5 0
London, futures	65 15 0	56 17 6
London, best selected	68 10 0	60 0 0

PIG IRON.

Possibly the demand for pig iron is not quite up to normal, but there is a good steady business doing on the basis of prices recently established. There does not appear to be any urgent call for any particular delivery, and no special movement in spot iron, but the recent transactions cover all deliveries from spot through the first half of 1909. The activity noted immediately after election seems to have subsided, and the present buying is practically confined to those who delayed placing their orders, possibly hoping for lower prices after the first rush was over.

This expectation has not been realized, as the market appears to be as strong as at any time since the recent buying movement began, and in fact there is a stronger feeling in some sections than there was a month ago. The withdrawal of several of the leading furnaces, North and South, from the market has had a good effect, and there now seems to be little doubt that the iron makers will be able to hold prices on the present level until renewed buying gives them an opportunity to lift values still higher.

Especial strength is being shown in the more distant deliveries, and while present quotations would possibly hold on orders extending through the first half of the year for the second quarter, a premium of 25@50 cents per ton is being generally demanded. The November business proves to have been on a good tonnage basis, and, being well distributed, shows that there was a general improvement in the foundry and manufacturing trades. Stocks are still small at the foundries, as a great deal of the recent business was for forward delivery, and, with the increasing difficulties incident upon the winter season, there is not likely to be any surplus iron available for melting for some time to come.

Actual quotations are very little changed, though a little firmer tone is reported from Birmingham. Alabama iron is still quotable at $13.00@13.50 a ton, though possibly there is less obtainable at the lower range than was the case in November. Several of the Alabama furnaces are out of the market entirely, and the situation seems to be steadily strengthening. Virginia iron is firm and unchanged. A number of the Virginia furnaces are also out of the market. Pennsylvania furnaces are asking slightly higher prices, but no general advance has yet been made, as plenty of iron is still to be had at $18.25@18.75 ton, New England delivery.

CHICAGO MARKET.

Lake Superior charcoal	$19.50
Northern foundry No. 1	18.00@18.50
Northern foundry No. 2	17.50@18.00
Northern foundry No. 3	17.00@17.50
Southern foundry No. 1	17.85@18.35
Southern foundry No. 2	17.35@17.85
Southern foundry No. 3	16.85@17.35
Southern foundry No. 4	16.35@16.85
Southern No. 1, soft	17.85@18.35
Southern No. 2, soft	17.35@17.85
Southern Gray forge	15.60@16.10
Southern mottled	15.35@15.60

PITTSBURG MARKET.

No. 1 foundry	$16.90@17.40
No. 2 foundry	16.25@16.90
Gray forge	15.40@15.90
Bessemer	17.40@17.90
Basic	16.40@16.90

BIRMINGHAM MARKET.

No. 1 foundry	13.50@13.75
No. 1 soft	13.50@13.75
No. 2 foundry	13.00@13.25
No. 2 soft	13.00@13.25

Rogers, Brown & Co., Cincinnati, will say in their weekly report:

"The demand for pig iron during the past week has been surprisingly large considering the heavy tonnage heretofore booked. There have been some fair sized sales for reasonably early delivery, but the bulk of the business has called for first and second quarters of 1909. Inquiries in this territory have been chiefly for foundry and grey forge.

"The consumption of pig iron seems to be increasing rather slowly and consumers do not anticipate any decided change until after the first of the year. It is not anticipated that contracts for castings will be placed of heavier volume for delivery beginning then that will justify an increased melt of iron.

"There has been considerable apprehension that idle furnace capacity might be started that would flood the market and depress prices, but thus far the output of those that have been put in blast has been taken care of, and when others are blown in it is anticipated that the business conditions will absorb the product without especial difficulty. Prices have remained unchanged.

"The coke market continues on about the same basis that has existed during the past two weeks. A considerable tonnage of furnace coke has been placed recently and other deals are being negotiated."

Matthew Addy & Co., Cincinnati, will say in their weekly report: "Tariff agitation is not having any real effect on the iron trade. There is some talk of the holding back of business until the tariff question is definitely settled, but as a matter of fact this is mainly talk and not much more. That radical changes in the tariff could and would seriously affect makers of both pig and finished iron is undoubtedly true, but no one dreams that radical changes of a destructive nature will be made by Congress. However, the iron trade in all its branches will breathe easier when the tariff schedules are fixed and the uncertainties of the situation are removed.

"Business this week has been made up of scattering lots mainly for near-by shipment. Prices are unchanged, but they are firm at the recent advance. Pipe makers have purchased some round quantities, but other than this the orders have not been large.

"Throughout the trade there is a feeling of great hopefulness. It is the general expectation that the iron business will continue its forward progress, the volume of trade gradually expanding with prices keeping pace with the general advance. The slow and sure betterment in trade conditions is regarded as much more satisfactory than if things came with a boom."

SEEDS.

The Leonard Seed Company, Chicago, says in its weekly report:

"Crops of all varieties of seed are now coming in rapidly from growers, and cleaning departments are working full time putting them in shape for early orders. Packing and shipping departments are now working on orders calling for January 1 delivery.

"It looks as though business would open up with a rush, as 'fill in' orders are beginning to show up even at this early date—we presume on account of short delivery on goods already ordered or because sufficient quantity was not originally ordered to meet requirements.

"Some varieties of corn which were previously reported as being in plentiful supply are coming in from growers much below estimates, Stowell's Evergreen, Zig Zag Evergreen, Old Colony, Hickox and Country Gentleman being the most disappointing. There is a tendency to stiffen prices on this account. However, there are many canners of corn who will not be in the market this season, as they have enough for their 1909 wants. This may prevent such high prices as prevailed some years ago when Country Gentleman went to $15 per bushel.

"Future contracts on peas of the canner's sorts are being closed at from 25 to 50 cents a bushel advance over last year's prices. This is on car load lots.

"Some sorts of garden seed are showing rather low germination, we hear. This is especially true on beet seed. We have word of one large lot which was held up on account of test. Buyers should be careful about purchasing any such stock, as it is being offered freely and at a discount."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 5
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$18 00@$18 50
North'n Fdy., No. 2	17 50@ 18 00
North'n Fdy., No. 3	17 00@ 17 50
Southern Fdy., No. 1	17 85@ 18 35
Southern Fdy, No. 2	17 35@ 17 85
Southern Fdy., No. 3	16 35@ 16 85
Southern Fdy., No. 4	16 35@ 16 85
Southern No. 1 Soft	17 85@ 18 35
Southern No. 2 Soft	17 35@ 17 85
Southern Gray Forge	15 60@ 16 10
Southern Mottled	15 35@ 15 60
Lake Sup. Charcoal	20 00@ 20 50
Southern Silveries, 4% Silicon	17 85@ 18 35
Southern Silveries, 5% Silicon	18 35@ 18 85
Southern Silveries, 6% Silicon	18 85@ 19 35
Jackson Co. Silveries, 6 per cent	19 90
Jackson Co. Silveries, 8 per cent	20 40@ 20 90
Jackson Co. Silveries, 10 per cent	21 90
Malleable Bessemer	17 00@ 17 50
Standard Bessemer	17 65@ 18 15
Alabama Basic	16 85@ 17 35

BLACK STEEL SHEETS.

No. 12	per 100 lbs.	$2 20@$2 30
No. 14	per 100 lbs.	2 25@ 2 35
No. 16	per 100 lbs.	2 35@ 2 45
Nos. 18-20	per 100 lbs.	2 60@ 2 65
Nos. 22-24	per 100 lbs.	2 65@ 2 70
No. 26	per 100 lbs.	2 70@ 2 75
No 27	per 100 lbs.	2 75@ 2 80
No 28	per 100 lbs.	2 85@ 2 95

GALVANIZED

No. 10	per 100 lbs.	$3 05@$3 10
Nos. 12-14	per 100 lbs.	3 05@ 3 10
No. 16	per 100 lbs.	3 05@ 3 10
Nos. 18-20	per 100 lbs.	3 15@ 3 25
Nos. 22-24	per 100 lbs.	3 30@ 3 35
No. 26	per 100 lbs.	3 50@ 3 55
No. 27	per 100 lbs.	3 70@ 3 75
No. 28	per 100 lbs.	3 90@ 4 00

POLISHED SHEET STEEL.

No. 24	per 100 lbs	$4 90
No. 26	per 100 lbs.	5 00
No. 27	per 100 lbs.	5 10
No. 28	per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20		$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, "A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel 8½c

SOLDER.

XXX Guaranteed ½ & ½	per lb. 18 c
Commercial ½ & ½	per lb. 17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks	case. per cwt.	$7 15
300 lb. Casks	per cwt.	7 15
Sheets	per cwt.	7 15

COPPER.

Copper sheet, 100 lbs. over, base ... 17c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4.37½@4.40
Bar	4.37½@4.40
National (White) brands (in less than 100 lb lots), per lb	8½c

Sheet.

Full coils	per 100 lbs. $9 00
Cut coils	per 100 lbs. 9 50

HARDWARE.

ADZES.

Carpenters'.

Plumbs	40%

Coopers'.

Barton's	20%
White's	15%

Railroad

Plumbs	40%

Ship.

Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

P. L. Waterproof, 1-10s	40c
G D	35c
Musket	60c

Shells, Loaded—

Loaded with Black Powder	40%
Loaded with Smokeless Powder, medium grade	40 & 5%
Loaded with Smokeless Powder, high grade	40 & 10 & 10%

Union Metallic Cartridge Co.:

New Club, Black Powders	40%
Nitro Club, Smokeless Powders,	40 & 5%
Arrow, Smokeless Powders	40 & 10 & 10%

Winchester:

Smokeless Repeater Grade	40 & 5%
Smokeless Leader Grade	40&10&10%
Black Powder	40%

Gun Wads—per 1,000.

Winchester Gun Wads	15%

Powder.

		Each.
DuPont's Sporting, kegs		$ 50
" "	½ kegs	2 50
" "	¼ kegs	1 40
Dupont's Sm'k'less	50-lb. drum	22 45
" "	25-lb. kegs	11 30
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
"	1-lb. cans	15

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGURS.

Boring Machine	70%
Irwin's	40&10%
Carpenter's Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearns, No. 3	36 00
Post Hole.	
Digwell, 8-inch, per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	0 25
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-12½%
Snell's " " "	40-5%

AWLS.

Brad.		
No. 3 Handled	per doz.	$0 40
No. 1050 Handled	"	80
Shouldered, assorted, 1 to 4,	per gro.	$1 20
Patent asst'd, 1 to 4	"	85
Harness.		
Common	"	95
Patent	"	90
Peg.		
Shouldered	"	1 20
Patent	"	60
Scratch.		
No 1 handled	"	4 80
No. 15, socket handled	per doz.	1 25
No. 7 Stanley		1 80
Sewing.		
Common	per gro.	90
Patent	"	90

AXES.

Boy's Handled.		
Lippincott, 3 lb	per doz.	$6 00
Falls City	"	6 00
Broad.		
Plumbs, West. Pat		33⅓%
" Can. Pat		40%
" Firemen's (handled)	per doz	$1. 75
Plumbs, Miners' (handled)	"	6 75
Single Bitted (handled)		
Gladiator . 3 to 4 lbs ,	per doz	$11 00
Flint Edge " "	"	9 25
Standard .. " "	"	9 25
Elec Chopper, Forest Clipper		10 50
Perfect Premier " "		10 00
Crown " "		7 00
Single Bitted (without handles)		
Gladiator . 3 to 4 lbs .	per doz.	$8 50
Flint Edge. "	"	7 00
Standard... "	"	7 00
Electric Chopper"	"	8 25
Perfect..... "	"	7 75
Crown..... "	"	6 25
Double Bitted (without handles).		
Gladiator... 3 to 4 lbs.	per doz.	11 50
Flint Edge. "	"	9 75
Perfect..... "	"	11 00

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs advance 25c
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	15	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	30%

BARS, CROW.

Pinch or Wedge Point . per cwt. $3 75

BASKETS.

Clothes.		
Small Willow	per doz.	$7 00
Medium "	"	8 75
Large "	"	10 50

Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz	$4 75	6 50	8 00

BEATERS.

Carpet.		per doz.
No. 10 Coppered Spring Wire		$0 90
No. 12 Spring Wire		1 10
No. 10 Preston		1 10
Rug.		Per doz.
No. 50 Imp. Dover		$0 75
No. 102 " "	tinned	85
No. 150 " "	hotel	1 40
No. 10 Heavy hotel tinned		2 10
No. 12 " " "		3 30
No. 15 " " "		3 60
No. 18 " " "		4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8-inch	per doz. $5 50
10-inch	" 10 50
Moulders'.	
12-inch	" 12 50

BELLS.

Call.	
3-inch Nickeled Rotary Bell, Bronzed base	per doz. $5 00
Cow.	
High Grade	60%
Kentucky	65&10%
Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
3 -in. Old Copper Bell	4 00
3 -in. Old Copper Bell, fancy	6 00
3 -in. Nickeled Steel Bell	4 50
3½-in. Nickeled Steel Bell	5 00
Hand.	
Hand Bells, polished	50&5%
White Metal	40%
Nickel Plated	30%
Swiss	40&33⅓%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50%

Parm. lbs	40	50	75	100
Each	$1.25	1.60	2.35	3.55

BEVELS, TEE

Stanley's, rosewood handle, new list	25%
Stanley's iron handle	25%

BINDING, OILCLOTH.

Zinc	80%
Brass	70&10%
Brass plated	75&5%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Triumph	50&5%
Ford's Ship	40&10%
Irwin	50%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	25%
" " Large " $26.00	25%
Irwin Car	45%
Ford's Ship Auger pattern Car	40&10%
Center	40&10%
Countersink.	
No. 18 Wheeler's	per doz. $1 25
No. 20 "	" 1 75
American Snail head	" 75
" Rose "	" 90
" Flat	" 75
Mayhew's Flat	" 1 25
" Snail	" 1 25
Dowell	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	60%
German Pattern	per doz. $0 60
German	" 65
Gouge	" 80
Spoon	" 80
Countersink	" 1 00
Reamer.	
Jenning's Square	" 2 50
Standard Square	" 75
German Octagon	" 75
Screw Driver.	
No. 7 Common	" 50
No. 1 Triumph	" 1 25

BLACKING, STOVE. (See Polish).

BLADES, SAW.

Butchers'.
Standard, ⅞ & 1⅛-in. 40%
Clock Spring 40%
Star 15%
Coil ..... each, $1 50

Hack.
Disston's ..... 25&5%
Flexible ..... 33⅓&5%
Star ..... 20&5%

Wood.
Jackson's ..... per doz. $2 25
Disston's—No. 0, 16, 26 & 045.. 4 25
Triumph 3 50
Forest Clipper 3 00

BLOCKS.

Snatch.
Wooden ..... 60&10%
Steel 50%

Tackle.
Iron Strapped 70%
Com. Steel 60%

BOARDS. (New List)

Stove ..... 50&10%

Wash.
Globe, single ..... per doz. $2 50
Globe, double ..... " 3 35
Peace Maker ..... " 3 00
Crystal Glass ..... " 4 00
Brass King ..... " 4 00
Nickel Plate ..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron ..... per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 3, lead ..... " 2 90
No. 4, " ..... " 3 40
No. 113, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter ..... 70&10%
Carriage, sizes larger and longer than ⅜x6 ..... 60&5%
Machine, ⅜x4 add sizes smaller and shorter ..... 70&10%
Machine, sizes larger and longer than ⅜x4 ..... 60&5%
Elevator ..... 50-10&5%
Plow ..... 60&10%
Stove ..... 80&10%
Tire 75%
Wagon Box Strap 70%

Mortis, Door.
Gem, iron 60%
Gem, bronze plated 20%

Barrel.
Cast 60%
Wrought .....
Wrought, bronzed 30%

Flush.
Wrought ..... 50&10%

Spring.
Wrought .....
Wrought, heavy .....

Square.
Cast ..... 50&10%
Wrought .....

BORERS.

Angular.
Miller's Falls ..... per doz. $13 00

Bung.
Doz.
Enterprise Mfg. Co.'s No 1... $14 00
" " No 2.. 16 50

BOXES

Mail, No. 1 2 10
Per doz $3.50 5.00 17.50

Miter.
New Langdon ..... 15&5%
Stanley's 30%
Seavey's ..... each, $1 50

BRACES.

Barber's ..... 50&10&10@50&10&15%
Pray's Genuine Spofford's 60%
" Nos. 66 to 146 ..... 50%
" No. 0108 ..... $3 50
" No. 08 ..... 2 75
" No. 010 ..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 00

Shelf.
Cast Iron, bronzed ..... 50-10&5%
Clover Wrought Steel ..... 70&10%
Clover Folding 70%

BROILERS.

Wire 70%
No. Cwron, Self-basting, 80doz .. $2 50

BUCKETS.

Pump, Rubber.
Wychoff ..... per gro. $4 75
Cooper ..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star ..... " 5 00
IXL ..... " 6 75

Well.
Galv'd Qts 10 12 14
Per doz $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding ..... per doz. $2 10

BURRS, RIVETING.

Copper Burrs only 30%
Tinners' Iron Burrs only ..... 65&5%

BUTTS.

Cast Iron ..... 70&5%
Wrought Brass (New List) 40%
Wrought Steel, Bright.
Wrought Steel, Japanned.
Nos. 731 and - ..... 70&10%

CALIPERS.

Double ..... 65&5%
Inside and Outside ..... 65&5%
Wing 70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M $3 75

Toe.
Shoenberger ..... per lb 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes ..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons 20 30 40
Each $4.25 $5.00 $5.25

Milk.
Holstein.
Nos 300 301 302
Gals 5 8 10
Per doz $26.00 $27.00 $29.00

Chicago Pat'rn.
Nos 105 108 110
Per doz $19.00 $21.50 $23.00

Iowa Pattern.
Nos 408 410
Per doz $23.50 $24.50

New Elgin Pattern.
Nos 705 708 710
Per doz $25.00 $27.00 $28.00

Burn Pattern
Nos 700 701
Gals 8 10
Price $2.40 $2.60

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular ..... each, $3 85
Diamond, Sling ..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf ..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing ..... 50&10%
Bed ..... 60&5%
Common Plate.
Brass Wheel ..... 60&10%
Iron and porcelain wheels, new list ..... 60&5%
Philadelphia Plate, new list 70%
Martin's 60%
Payson's ..... 75&10%

CATCHERS, GRASS.

Carroll's, No. C ..... per doz. $4 25
Wildermuth's,.
Nos 1 2 3
Per doz $5.00 $5.75 $6.25
Nos 4 5 6
Per doz $6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack ..... doz. pairs, $5 75
With Covert Snaps, " 5 00
With Slide ..... " 3 25
Without Slide ..... " 2 85

Bright Ox Chains.
⅝-in. $7.25; ½-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch ..... 5/16 ⅜ 7/16 ½
Per 100 lbs. $10.80 $6.00 $7.00 $8.20
Inch ..... 5/16 ⅜ ½ ⅝
Per 100 lbs. $6.00 $5.90 $5.75 $5.65
Inch ..... ⅜ 1 1¼
Per 100 lbs $5.55 $5.55 $5.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.

Cow Tie Chains.
American, 2 toggle ..... 50&5%
" toggle and snap... 50&5%
" open and closed ring ..... 50&5%

Halter Chains.
American, new list 33⅓%
German 60%
Niagara, new list 40%
Brown's, " 40%

Picture Chains.
Light Brass, 3 ft ..... per doz. $0 65
Heavy Brass, 3 ft .... " 1 00

Pump Chain
Galvanized, per 100 lbs $5 50

Safety Chain.
Brass 60%

Special Steel Loading Chain.
Inch ..... ⅜ 7/16 ½
Per 100 lbs $16.00 $13.50 $12.50

Stretcher Chains.
5/16-in. $8.50; ⅜-in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's ..... 70&5%

Trace Chains.
Western Standard.
6½— 6-2 ..... per pair 30c
6½— 8-2 ..... " 34c
6½— 8-3 ..... " 33c
6½—10-2 ..... " 38c
7 — 8-2 ..... " 38c
7 —10-2 ..... " 42c
7 —10-1 ..... " 48c
7 —10-0 ..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch ..... ½ 9/16 ⅝
Per 100 lbs $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue ..... per gro. 75c
Red ..... " 65c
White ..... " 55c
Common White School Crayon ..... " 8c

CHARCOAL.

In bags ..... per bag 90c

CHECKS, DOOR.

Blount 33⅓%
Sargent's 33⅓%

CHIMNEY TOPS.

Iwan's Volcano 50%

CHISELS.

Box.
Inches 10 12 14
Round per doz $2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20

Cold.
Good quality, ⅝ in. and larger ..... per lb. .12c
Smaller size per doz .....

Socket, Framing and Firmer.
Clover ..... 75&10%

Tanged, Firmer.
With handles ..... 30&5%

Choppers, See Cutters, Meat.

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers ..... per doz. $6 25
Yankee, for Yankee Screw Drivers 5 00

CHURNS.

Anti-Bent Wood,
Gal 5 7 10
Each $3.90 $4.60 $4.85
Belle, Barrel ..... 65&7½%
Common Dash, Gal. 4 5 6
Per doz $7.75 $8.50 $10.50
Union, Gal 5 7 10
Each $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's 30%

Carpenters'.
Steel Bar 25%

Hose.
Sherman's, brass, ⅝-in., per dos.. 42c
Double brass, ⅝-in., " 90c

Saw Filers.
Disston's list, $30.00 ..... 30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $7.50.

CLAWS, TACK.

Cast, wood hdle ..... per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid steel ..... " 1 00
Giant ..... " 50

CLEANERS.

Drain.
Iwan's Adjustable 55%
Iwan's Stationary ..... 40&5%

Pot.
Wire ..... per doz. $0 55

Side-Walk.
Steel ..... per doz. $3 25
XLCR ..... 65&5%

CLEAVERS

Family.
Griffin, Inch 6 7 8
Per doz $5.50 $5.75 $6.25
Royal ..... per doz. 2 25

Butchers.
Plumbs 25%

CLEVISES

Malleable ..... 5½c lb.

CLIPPERS.

Bolt ..... $1.90@4.75

CLIPS.

Axle ..... 65&5%

Damper.
Standard ..... per doz. 65c
Troy ..... " 38c

Hame ..... " 17

CLOTH

Emery.
Star 50%
B. & A 50%

Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5 ..... " .. 3 00
6 ..... " .. 3 25
7 and 8 ..... " .. 3 75

Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs... 60, 10&5%
Lever Bibb Cocks ..... 60, 10&5%
Compression Hose Bibbs .. 50—10&5%
Japan Faucets (new list).. 50—5%
Backing Cocks (new list)... 60, 10&5%
Compression Lock C'ks (new list). 70%
Andrew's Brass Faucets 70%
Angle Plug Faucets, per dos $0 85
Milk Can Faucets, per doz.. $2.60-4.20
Petroleum Faucets ..... 75&5%

COLLARS, STOVE PIPE.

Inches 5 6 7
Plain Tin.. per gro. $1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass" 3.00 5.50 4.25

COMBS, CURRY.

Nos... 000 11 15 20 80 108
Per
doz.. $.37 .60 1.00 .90 1.15 .80
Nos... 200 220 300 532 620 1400
Per
doz. $1.05 .65 1.35 1.20 .75 1.40

COMPASSES.

Carpenters' ..... 60—10—10%
Pencil—Faber's ..... per dos. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb ..... per lb 30c
1½ lb ..... 31c 2 lb ... " 29c
3 lb and larger ..... " 28c

CORD.

Picture
White Wire (new list) ..... 85&10%

Sash.
Monarch Braided Flax ... per lb
Silver Lake, white, 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone ..... 8-32 in. " 20c

CORKSCREWS.

Humason & Beckley 33⅓%
Walker's 33⅓%
Williamson's Regular ..... 40&10%
Williamson's Forged Worm 50%

COTTERS, SPRING.

All sizes—new list ..... 90&20%

COUPLINGS, HOSE.

Brass ..... per dos. 8
Brass Plated ..... " 85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine .... per dos. $22 75

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3½c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%
Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife Slaw..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan s Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, painted...per doz. $7 92
1⅛ in. 4-panel, painted... " 9 50
1⅛ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos..... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List..60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.60
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.05 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.65 $0.95
Planished, " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size .....5-lb. pkgs. ½ kegs, kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 00
Coal, Coke, Cottonseed.....35%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Feeder.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine 60%
Ore.....40%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.50 4.50 5.20

GAUGES

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....50&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12 c
A White..... " 15 c
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... " 9 00
Hub Lightning..... " 5 25
Paragon..... " 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 75
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80&5%
5 lbs. and over.....80&10%
Masons'.
Single and Double Face.....80&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 35
Peck's Adjustable.... " 2 10
Ives' Adjustable.....per set, 1 35
Axe.....60%
Chisel.
Hickory, Tanged Firmer, Assorted, 23c; Large, 28c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....50&10%
Drifting Pick.....50&10%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 43
Shovel and Spade.....[illegible]%

HANGERS.

Barn Door.
Nansen.....60&10%
Matchless.....70&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse.....60%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $3 35
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crown.....60-10&5%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " $0 85@1 10
Germantown.....50%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wensleman's No. 1.....per doz. $9 00
Wensleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 00
Gate.
Clark's..... 1 2 3
Hgs & Latch..doz. $2.50 2.90 4.00
Hinges only... " 1.90 2.30
Latches only . " .70 .75
Knuckle.....per doz prs. $4 00
Lead's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
American.....20%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....30%
New Idea.....per gro. $8 00
Oxford.....20%
Wrought Iron
New Lists .....
McKinney
Light Strap Hinges.....60%
Heavy Strap Hinges.....65%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 75
14 to 20 in..... " " 3 65
22 to 36 in..... " " 3 40
Screw Hook and Eye.
½ in.....per 100 lbs. $6 75
⅝ in..... " " 7 75
¾ in..... " " 9 75

HOES

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware

HOOKS.

And Eyes.
Brass.....50&10%
Iron.....65&10%
Awning.....per gro. $1 00
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Husk.
Common Axe Handle.per doz. $7 00
Chain.
Inch... .. ¼&⅜ ½ ⅝ ¾
Per 100...$7.00-8.10 9.75 11.50 12.00
Clothes Lines.
Japanned .....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron . . . . . per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.... .....25%
Wrought.....30%
Corn.
Common, unpolished, per doz. $1 50
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring .....per lb. 5½c

HOOPS, TUB.

Elastic . . . per case of 2 doz. . . . $1 50

HOSE, GARDEN.

		Coupled, per ft.
Heron, 3 ply-½" guar. press	55 lbs.	7½c
Crane.. " " "	75 "	8½c
Falcon " " "	95 "	9½c
Eagle " " "	120 "	10½c
Condor " " "	150 "	11½c
High Test " " "	200 "	12½c

COTTON COV. RUBBER HOSE.

High Grade-½"-guar. press.	400 lbs.	11½
Special " " "	300 "	9½c
Leader " " "	100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.....$2.00 2.00 1.75 .50
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 00 50 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40

IRON.

See Metals.—First column.

IRONS.

Curling.
X.....per doz. $0 40
Y..... " 50
Z..... " 58
Jewel..... " 85
Imperial..... " 1 00
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 4 50
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's,
No. 50 J. Enterprise, per set 93
No. 55 J. " " 90
No. 50 T. " " 1 00
No. 55 T. " " 96
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest . . " 6 25
Sutton.....each.... 2 60

JACKS.

Locomotive.....70%
Wagon.
Oliver.
Nos..... 0 00
Each.....$0.60 $0.80

Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper.....per lb., 27c
Maslin.....65%
Sugar.....50%

KNIVES.

Boot Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters' 10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 5 25
Heath's..... " 3 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander's..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2½-in. Regular..... " 4 90
2 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes' . . . . . net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 30c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
60-ft. Cotton..... " 1 15
60-ft. Braided Cotton " 25

LINING, STOVE.

Fin Bricks .....per crate. 42c

MACHINES.

Boring.		Without Augers	With Augers
Angular.....per doz.		3 00	4 40
Upright..... "		2 00	4 00
Leather Riveting.			
Chicago, Pomeroy....per doz.		$0 00	
Excelsior.....	"	2 00	
Handy.....	"	2 00	
Little Giant.....	"	3 00	
Pony, Pomeroy.....	"	7 20	
Washing.			
Winner.....per doz.		54 00	
Keystone.....	"	54 00	
U. S. Steel.....	"	60 00	
Advance, f.o.b.Chicago	"	24 50	

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS.

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs.....	10	13	16	18
Per doz....	$4.00	4.50	5.25	5.60
Wood face, lbs.....	10	12	14	
Per doz.....	$5.00	5.50	6.00	

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....40&5%
Second Quality.....50&5%

MILLS, COFFEE.

Enterprise.....25%
Parker.....40-12½&2½%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1½ 2
Per dozen.....$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Gladiator—B. B.
Inches..... 16 18 20
Each..... 6.50 7.25 8.00
King Universal—B. B.
Each..... 5.25 3.75 6.00
Inches..... 14 16 18
Big Giant..... 3.50 3.90 4.25
Little Giant 2.50 2.65 2.75

NAILS.

Cut Steel . . . . . rates, $2 50
Cut Iron..... 2 00
Wire.
Small Lots..... $2 28
Carload Lots..... 2 18
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf .....per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....55%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforewearing .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.20
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 90
Magic..... " 3 00
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ½ ⅝ ¾ ⅞ 1 1¼
lb 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ½ ⅝ ¾ ⅞ 1 1¼
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chain Patterns.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin . . . . . per doz. $2 00@$2 25
Machine.
Common.....per doz. $0 50
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat.....per doz. $2.85 3.60 4.15
Round.... " 2.10 2.25 2.75
Can.
Delmonico .....per doz $1 30
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. 11 00
Economy..... " 4 05
Family..... " 9 75

PADLOCKS.

Standard Wrought.....75&5%
Champion.....50%
Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt., without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt.,IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt.,IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.
Galv'd, qts. 14 16 18 20
Per doz.... $3.75 4.00 4.75 5.25
Water.
Galvanized... qts. 10 12 14
Per doz..... $1.95 2.20 2.45
Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,
Nos..... 1 2 3 4
Per doz.... $4.75 5.75 6.50 7.50
Neverburn . . 4.00 4.50 5.50 6.00
Savory, No. 290.....per doz. $5.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star ..... low list, 50%
B. & A.....50%
Wrapping.
Drab Fiber .....per lb. $0 06
Red..... 6 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 0 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches	6	8	10	12
Per doz	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 82
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils .....per lb. 7½c
Cut coils..... " 7¾c
Stove

Acme—Inches	5	6	7
Smooth, per jt	8½c	9½c	10½c
Planished, "	32 c	33 c	43 c
Peerless—Smooth,	7½c	8 c	9½c
Polished	14½c	15½c	18 c
Planished	28 c	31 c	35½c
Made-up—Inches	5	6	7
Smooth	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
	Cents			
Battle Axe Blue	7	7½	9½	10½
Can't Slip "	7½	8½	10	11
Peerless "	7½	8½	10	11
Duplex "	10	11	13	14
Yale, Rus. Fin	15	16	17	18
Duplex Planished	29	31	37	38
Galvano, Gal	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@⅜-in., black.....discount, 60%
⅜@½-in., black..... " 60,10&5%
¾-in. to 6-in., black... " 70%
7-in. to 12-in., black... " 62½%
⅛@⅜-in., galvanized.... " 42%
⅜@½-in., galvanized.... " 50%
¾-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench .....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Button's—80% off list.
Cutting
Bernard's.....30%
Lodi.....50%
Upper End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....60%
Fencing.
Black Bull.....per doz. $8.25
Farmers' Choice.....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%

Gas.—Inches	7	8	10	12
Per doz	$3 00	3.50	4.50	5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common .....60&10&10%
Cook's.....40%
Davis' Iron 25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'ls " 80
Nickel Plated, coil hand'ls " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
A-B Oil Metal Polish, 4-oz. bottles, 3 doz. case, per gr. $9 00
1-gal. can..... 90
White Silk, half pints, per doz, $3 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .55c@$1 75
Imperial.....per gro 5 00
Stove.
A-B Polishes.
Liquid Stove Polish.
3 doz. in case.....$2 25
6 " " .....gr., 9 00
Fireproof Stove Polish, 3 and 6 doz. in case.....gr., 12 00
Liquid Waterproof Stove Polish, 10-oz. cans, per gro., 12 00
Oil Paste Polish.
6-oz. cans, 3 doz. case..... 2 25
1-lb. " 3 " " 3 75
5-lb. " per can..... 50
Dry Powdered Stove Polish.
5-lb. box..... 75
100-lb. bbls.....per lb. 12
Powder Polish. 3 doz. 6 do. 12 doz.
$2.25 $4.50 $9 00
Water Paste Stove Polish, ½-lb. boxes, 3 doz. case..per gro., 12 00
Black Eagle, 1-lb. cans, pr gr, $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans.... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 39
4-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's, each, $4 75@6 25
Gate City.....each, 6 25
Gem.....each, $6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy..... each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in.... " 1 75
Wood Wheel, 6-in. pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos	1	2	3	4
Each	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each,... 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 2
Machine.....per lb 19
Saddlers'.
Common .....per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 2

RAIL.

Barn Door.
Matchless, 1-in..... 3
Matchless, 1½-in..... 3
Storm King..... 4
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 2
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 0
Lawn—Wood.
XXX.....per doz. $3 0
Automatic..... " 5 2
Lawn Queen..... " 2 7
Jumbo, 36 teeth..... " 5 2

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

(All Sizes)

Japanned, Bronzed and Plated...70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 38x42.....75&10%

Heavy Round Gratings.....75&10%
White Porcelain Enameled...50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

	2½ in.	3in.
Copper		
Per doz	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz	85	95
Nickel plated	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... 50
Brown's Ringers..... " 80
Champion Ringers.... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. .per lb. 11½c
¼, 5-16 in Com. in coils.. " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal
1st Quality .....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb. 15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's .....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprize, hand.....per dos. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling 25%
One Man.....50%
Panel
Brown's 30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's 25%
Disston's 25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel . . . per doz , 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in	1	1½	1¾
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial

Nos	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman. " 7 50
Honest Dutchman..... " 7 50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, common..... " 42
Octagon, common..... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond..... per doz $1 60
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
California Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip, doz.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.00

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list .....Discount, 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz..... 30c 35c 40c 54c

Reliance.
Per doz.... light, $1.25; heavy, $2 50
Star.
Per doz.... light, 90c; heavy, $1 35
Torrey's.....per doz. $1 35
Warner's No..... 11 13
Per doz..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Miter.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 7
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 7
Porcelain Lined, Wood. " 1 2
Boss, malleable iron.... " 1 2
Iron Frame, porc'n bowl " 1 9
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb . . .9½@9¾c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....50-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan .....per lb 5½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@00&5%
Oil—Mounted.
Arkansas Hard.....per doz.$23 0
Arkansas Soft..... " 15 5
Hindostan .....per lb 6½@6
Oil—Unmounted.
Arkansas Hard.....per lb $2 0
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille ..... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 50

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. @ 22c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 13
Tin Choker..... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....30%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each $2 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood.				Ex.
Nos.	3	2	1	large
Per doz.	$5.00	6.00	7.00	9.50
Dowell.				
Per doz.	5.35	6.35	7.00	9.50
Cedar.				
Per doz.	6.10	7.10	7.90	10.80
Indurated.				
Per doz.	8.55	9.45	10.80	13.50
Galvanized.				
No.	1	2	3	
Per doz.	$6.00	6.75	7.75	

TWINE.

Per lb.
3-ply Cotton Wrapping 25c
4 " " " 25c
" " Extra Wrapping.....27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes....27c
3 " " " " cones 25c
4 " " " " " 25c
India Hemp, ¼-lb. balls 19c
" " ½-lb. " 18c
" " ¼-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seins.
Nos..... 9 12 15
Soft.....per lb 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-ply "B" in hanks 18c
4- " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks...37c
Fodder or Lath.
130 strand.....6½c
200 strand.....—c

VISES.

Phœnix.....30%
Phœnix Oval Slide.
Inches..... 2½ 3 3½ 4½
Each..... $1.25 1.50 1.85 2.75
Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots,
Tinned.....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:

In.	½	⅝	¾	⅞	1	1¼	1½
	9c	6½c	5c	4½c	4½c	4½c	3½c

Wrought steel in 5-lb. boxes, per lb.:

In.	½	⅝	¾	⅞	1	1¼	1½
	10c	7c	6c	5½c	5c	5c	4½c

WASHING MACHINES—

See Machines.

WEDGES.

Ax.....per doz. $0 30
Galling.....per lb. 10½
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 00

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 39 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per doz..... $2.40 3.25 4.00 6.00

WIRE.

Barbed.	Painted.	Galv'd
Carloads .. per 100 lbs.	$2.33	$2.63
Less than car "	2.43	2.73
Brass.		
In coils		20%
In 1-lb. spools, new list		50%
Broom—Tinned . . .		60&10&10&10%
Cable—Same price as Barbed Wire.		
Copper.		
In coils		20&10% 33⅓%
1-lb. spools, new list		50&10%
Fence—Smooth.		
Nos. 6 to 9, An'eal'd, pr 100 lbs.		$2 30
Nos. 6 to 9, Galv'd.. "		2 60
Hair—New List		50%
Market.		
Bright, full bdles		70&5%
Bright, broken bdles		70%
Coppered, full bdles		70%
Coppered, broken bdles		65&10%
Tinned, full bdles		75&5%
Tinned, broken bdles		65&10%
Picture—In coils		80% @80&10%
In 5-lb. spools.....per lb		.26c
Plain—Small lots		$2 10
Car lots		2 05

Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%

WRINGERS.

No. 22, Guarantee....per doz. $22 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 33 50
No. 110, Bicycle..... " 31 50
No. 500, Royal..... " 32 50
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No. 300, Novelty..... " 28 00
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Canton Art Metal Co., Canton, O
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Armor-Clad Mfg. Co., Canton, O

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Denning Wire & Fence Co., Cedar Rapids, Ia
Janesville Barb Wire Co., Janesville, Wis
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Foundry Supplies
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American Furnace Co., St. Louis, Mo
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Haynes-Langenberg Mfg. Co., St. Louis, Mo
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Hardware Specialties
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Pullman Mfg. Co., Rochester, N. Y
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Smith & Hemenway Co., New York, N. Y
Welland, Chas., New York, N. Y

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Hussey & Co. C. G., Pittsburg, Pa

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Janesville Barb Wire Co., Janesville, Wis

Nuts
Columbus Bolt Works, Columbus, O

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Connors, Wm., Paint Mfg. Co., Troy, N. Y
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Dixon, Jos. Crucible Co., Jersey City N.J

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Harrington & King Perforating Co., Chicago, Ill

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Star Bucket Pump Co., St. Louis, Mo

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Canton Mfg. Co., Canton. O
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Bromwell Brush & Wire Goods Co., Cincinnati, O
Denning Wire & Fence Co., Cedar Rapids, Ia
Janesville Barb Wire Co., Janesville, Wis
National Wire Cloth Co., Niles, Mich
Pittsburgh Steel Co., Pittsburgh, Pa

Wrenches
Perfection Wrench Co., Port Chester, N.

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES.

PATENTS HUBERT E. PECK 623 F. STREET, N. W. Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

For Sale—New clean stock of hardware and stoves. Will invoice about $6,000. Can be reduced. In the best town in Southwest Missouri; 40,000 inhabitants; located on the best retail street in town. Reason for selling, sickness. Address L-63, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

For Sale — My stock of hardware, stoves, cutlery, shelf hardware, paints, oils, tinshop tools, stock of gas pipes and plumbing fittings, with good trade of furnace and hot water. Trade mostly cash, in one of the best farming and dairy sections in Illinois. No dead stock. Rent reasonable. Address L-60, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

Wanted to Buy—Good second-hand Tapping Machine in good condition for tapping water mains. State kind and size taps and lowest net price. Address Kinlry & Son, Beloit, Kansas. 24-3t

For Sale—Hardware stock and fixtures. Clean. A good opening for tin and galvanizing shop. Retiring from business. Address Schmidt Brothers Co., 7123 Cottage Grove Ave., Chicago. 24-3t

For Exchange—Farm of 106 acres in Shelby Co., Illinois, for stock of goods to invoice $3,000 to $4,000; or would travel for some good house. Address L-59, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Illinois. 23-3t

Wanted to Invest—About $2,500 in Hardware in good Western town by man with 30 years' experience in hardware, plumbing and tinning business. Address L-57, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 23-3t

For Sale or Trade—If you have a good stock of hardware and stoves you wish to exchange for some good land, write "Wad," 416 South Main St., Clinton, Missouri. 22-3t

For Sale—Hardware stock in new town in North Dakota. Good clean stock; fine country with large territory. Good reasons for selling. About $3,500 cash required. Address L-53, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-3t

TINNER'S TOOLS.

Wanted—Full set of tinner's tools. Must be in good condition and include brake and squaring shears. Would like to correspond with some one who has Cornice Brake for sale. Address M. A. Mawhorter, Albany, Indiana. 24-3t

For Sale—One 20" P. S. & W. Bar Folder, $10; one 30" P. S. & W. Stove Pipe Folder, $4; one 17" P. S. & W. Brass Mounted Groover, $3; one No. 1 P. S. & W. Beading Machine, $8. All in good condition. Address L-62, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

HELP WANTED.

Tinner Wanted—Young man, 25 to 40 years old. Must be sober and reliable. Roofing and furnace hand; man with plumbing and pipe fitting experience preferred. Steady employment. Address J. D. Wilson, Mason City, Illinois. 23-1t

Wanted—Tinner and furnace man. Must be German, also a good salesman and man of good habits. Address Cash Hardware Co., Cedar Bluffs, Nebraska. 23-3t

Tinner Wanted—By Christmas or sooner. One who is a hustler, honest and good appearance. Man for all kinds of work in country shop. Must clerk at times in store. Have good tools and shop and a good steady job. State wages wanted. Address H. A. Ebert, Alden, Minnesota. 22-3t

Wanted at Once—Good tinner, who can do some cornice work. Will pay good wages for a first-class man. Address W. B. Hayden & Sons, Cassopolis, Michigan. 22-3t

Wanted, Tinner—One good on outside and inside work. Must understand furnace work and ordinary plumbing pumps and pipe work. Position permanent; town of 2,000; must be temperate. Address L-56, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-3t

Wanted—Reliable foreman for cornice shop doing a general line of sheet metal work. Address L-54, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-3t

SITUATIONS WANTED.

Wanted, Position—As retail stove and hardware clerk. Six years' experience. Best of references. Address L-64, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

Situation Wanted—By a tinner. First-class sheet metal worker, plumber and furnace man. Steady and reliable. A-1 in every respect. Address L-61, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

Situation Wanted—Tinner and plumber, competent workman at all branches of heating, plumbing, sheet metal and cornice work, would like position by first of the year or sooner. Please state wages in first letter. West or Southwest preferred. Address Arthur Greeter, Silver City, New Mexico. 24-3t

Situation Wanted—By all around tinner and sheet metal worker. Address C. A. Storch, Odell, Illinois. 24-2t

Situation Wanted—By first-class hardware clerk. Capable of doing tinsmith work. Have been in hardware business for the past 15 years. Can speak German; sober, honest and reliable, and not afraid of work. Kindly state wages in first letter. Address L-65, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

Situation Wanted—As plumber. Three years' experience. Wisconsin preferred. Have some money to invest in established plumbing shop. Address L-66, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

Situation Wanted — By A-1 good all around tinner where good services are appreciated. Reliable, sober, steady, married man. You will not miss it if you are looking for a good mechanic. Small city or county seat preferred. Address L-58, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 23-3t

Situations Wanted—Two tin and sheet metal workers and furnace men would like positions in town of 10,000 or smaller. Can do plumbing, pump work and general jobbing. Nothing but steady positions wanted. State wages willing to pay to two honest and reliable men. Address Tinner, 342 E. 10th St., St. Paul, Minnesota. 23-3t

Situation Wanted—By good all around tinner and furnace man, with thirteen years' experience, where good service is appreciated. State wages. Address L-55, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 23-3t

SPECIAL NOTICES.

WANTED

At once, a partner to finance my **patent, screwless door hinge** or will sell one-third right. The only thing of its kind on the market. One of the cheapest and best selling hinges manufactured. Address H. P. Squires, Corvallis, Montana. 23-4t

Wanted

A1 Stove Salesman for retail trade. Good steady position. State particulars and salary expected. Address Yakima Hardware Company, North Yakima, Washington. 23-3t

Situation Wanted

By first-class Stove Salesman of considerable ability with established trade in New Jersey, New York and Pennsylvania. In habit of calling on large trade. First-class reference. Address B-37, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 19-ufn

STOVE SALESMEN WANTED

We have openings for two first-class energetic men who are business getters, one of whom must be experienced in the sale of gas stoves. Address Blakesley-Tuttle Stove Co., Kansas City, Mo. 21-3t

I Want, By January 1st, 1909,

A steady position in a Hardware, Stove, Sheet Metal, Furnace, Steam and Hot Water or Plumbing Shop. Can handle anything in this line as Salesman, Manager, Superintendent or Foreman. Can estimate correctly and systematise work for an up-to-date, pushing business on a money making basis. Prefer city of from 100,000 to 500,000. 24 years experience. References as to habits and ability if required. Address B 65 care of THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 24-1t.

WANTED

For general territory, an experienced **Malleable Range Salesman.** Address Faultless Stove Works, St. Charles, Illinois. 24-4t.

WANTED

TINSMITHS or others familiar with furnace work to send us names of parties about to buy warm air furnaces. Liberal commission will be paid. Address Heating Supply Company, Detroit, Michigan. 24-2t.

POSITION WANTED

By a First-class Stove **Salesman,** having 5 years experience at road and exhibit work. Thoroughly reliable and a hustler (30 years old). Experienced in Malleable and Cast Iron goods. Address E. J. B., 134 East R. R. Street, Fostoria, Ohio. 24-2t.

FOR SALE

Good clean **Hardware Stock** with **Tinshop.** Located in one of the largest Wisconsin towns. Invoices about $4000. Splendid trade but sales can be doubled by devoting more time to the business. Owner has manufacturing interests which require his entire attention. Cash only. Address Retailer, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-ufn

For Sale

One set of oak **Hardware Shelving,** 47 feet long, 11 feet 10 inches high; containing two sliding door wall cases with 48 tool hangers. 100 base drawers 24 inches long, 642 shelf boxes, one ladder and track and two nail bin counters to match. Photo and price upon request. Address W. B. Heller & Co., Montpelier, Ohio. 22-4t

RESIDENCES AND SMALL BUILDINGS

need comparatively as much ventilation as large constructions. Very frequently the ventilation of a residence is left to the cracks and crevices—which at best is most unsatisfactory and inadequate.

Burt Combination Skylight Ventilators

are praised in actual use. Absence of all odors, dampness, drafts, and providing the pure, healthful atmosphere in the home is the result of using Burt Ventilators.

Send for our new 96-page catalogue, giving fine illustrations of Mills, Factories, Shops, Foundries and Residences where Burt Ventilators are in successful use.

THE BURT MFG. CO., 650 Main St., Akron, Ohio

The Largest Manufacturers of Oil Filters and Exhaust Heads in the world

GEO. W. REED & CO., Montreal, Sole Manufacturers of "Burt" Ventilators for Canada

Notice Sliding Sleeve Damper. Patented.

SPECIAL NOTICES.

Salesman Wanted

First-class salesman to sell high grade stove specialty in West. Give experience, territory covered and references. Address B 60, care of THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 24-1t.

Stove Manufacturers and Jobbers

A gentleman of large experience selling stoves in the states of the middle West, would like a situation as sales manager, buyer or position that did not require constant travel. Address Employee, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Ill. 20-4t

WANTED

An experienced stove salesman to travel in Iowa, to represent a first-class line of STOVES and RANGES; one who has an established trade on the territory preferred. Address Bergstrom Stove Company, Neenah, Wisconsin. 24-2t.

For Sale

One complete line of new **Wood Cook Stove Patterns,** sizes, 7-14, 8-16 and 8-18, with reservoir attachments for 8-16 and 8-18. Also two sizes Coal Cook 8-16 and 8-18 with reservoir attachments. Also two complete lines Steel Range Patterns, modern in construction and decoration. From 50 to 150 Stoves and Ranges have been made from these patterns. All will be sold at a sacrifice. Address Lee Foundry Corporation, Anniston, Alabama. 24-1t

WANTED

A first-class salesman who is qualified to sell an A1 line of **Warm Air Furnaces** in the states of Ohio, Michigan and Indiana. One who has covered all or at least a part of this territory preferred. Enclose references and state age and experience. Address Syracuse Stove Works, Syracuse, N. Y. 23-3t

Furnace Salesman

Good opening for experienced furnace salesman. Address, stating territory covered, experience and salary expected. Address B 61, care of THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 24-4t.

STOVE SALESMEN WANTED

For a complete modern line of Gas, Coal and Wood Stoves. Territory—one for Western New York and Pennsylvania, also one for Indiana and Eastern Illinois. Address B 63, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-ufn.

Position Wanted

Experienced stove salesman would like to correspond with stove manufacturer in need of man in Chicago or West. Address B 62, care of THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 24-ufn.

We Want a Foreman

For our Wood and Iron Pattern Shop. The best man in the United States is the man we want, and we can make it interesting for this man. Our shop is located in an Eastern City and is occupied in the production of all kinds of heating and cooking apparatus. Address B-54, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-5t

WANTED

Two capable men to sell Galvanized Ware and Sheet Metal Goods in Pennsylvania. Give reference and salary expected, also previous experience. Address "Capable" care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 20-eow

Will you accept this business book if we send it free?

Sign and mail the coupon below. Send no money! Take no risk!

One hundred and twelve of the world's master business men have written ten books—2,193 pages—1,497 vital business secrets. In them is the best of all that they know about

—Purchasing	—Retailing	—Handling Customers
—Credits	—Wholesaling	—Adjustments
—Collections	—Manufacturing	—Position-Getting
—Accounting	—Stock-Keeping	—Position-Holding
—Time-Keeping	—Pricing	
—Cost-Keeping	—Man-Handling	—Business Generalship
—Advertising	—Man-Training	—Competition Fighting
—Correspondence	—Organization	and hundreds and hundreds of other vital business subjects.
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A booklet has been published describing, explaining, picturing the work. Pages 2 and 3 tell about managing businesses great and small; pages 4 and 5 deal with, credits, collections and with rock-bottom purchasing; pages 6 and 7 with handling and training men; pages 7 to 12 with salesmanship, with advertising, with the marketing of goods through salesmen, dealers and by mail; pages 12 to 15 with the great problem of securing the highest market price for your services—no matter what your line; and the last page tells how you may get a complete set—bound in handsome half morocco, contents in colors—for less than your daily smoke or shave, almost as little as your daily newspaper.

Will you read the book if we send it free? Send no money. Simply sign the coupon.

The System Co., 151-3 Wabash Ave., Chicago

If there are, in your books, any new ways to increase my business or my salary, I should like to know them. So send on your 16-page free, descriptive booklet. I'll read it. 122-15

Name _____

Address _____

Business _____

Position _____

Have You Seen the Perfection Wrench?

The newest and best wrench made. All steel, great strength. Instantly adjusted. Easily and quickly operated. Positive grip. Immense time, trouble and temper saver. Indispensable to automobilists. Best "all round" tool ever offered for sale. Must be seen to be appreciated. "You'll want one when you see it." For circular, address THE PERFECTION WRENCH CO., Box 426J, Port Chester, N. Y.

The expense and annoyance of painting will not recur every year or two if you use

Dixon's Silica-Graphite Paint

the "Proven Shield for Steel Work." Durability records in all climates; write for a few.

JOSEPH DIXON CRUCIBLE CO. Jersey City, N. J.

THE RIGHT KIND
of Oven Thermometer is

THE "ACME"

THE "ACME"

MADE BY EVANS STAMPING AND PLATING COMPANY TAUNTON, MASS.
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YOU CAN'T HELP BEING SATISFIED
IF YOU BUY YOUR
Stove Dealer's Supplies and Stove Repairs
of the A. G. BRAUER SUPPLY CO. We have the Goods.
Lowest Prices. Prompt Shipments.
GIVE US A TRIAL.
A. G. BRAUER SUPPLY CO., 316-318 N. Third St., St. Louis, Mo.

YOU GET SATISFACTION
WHEN YOU BUY
Stove Repairs and Water Fronts
FROM US
They are made of the BEST IRON
and guaranteed to fit.
Manufacturers' Stove Repair Co.
515 to 539 Diversey Blvd. " " CHICAGO, ILL.

SPERRY'S SUGAR KETTLES

Light, smooth, full measure and guaranteed perfect. Made from original patterns. Metal, the right kind in the right place. Ask your jobber for them or write us.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS Batavia, Ill.

We Make It!
The BEST Air Drying Iron Enamel Made.
Try a 1-Dozen Case From Your Jobber.
Nickel Plate Stove Polish Co.
CHICAGO
Large 10 oz. Can.

$100 IN GOLD FOR WINDOW DISPLAYS SEE PAGE 44.

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Made from Galvanized Tin and Painted Tin
Storm, Rust and Fire Proof
Do you want to increase your business? This is Your Opportunity. Write for catalogue samples and prices.
National Sheet Metal Roofing Co.
JERSEY CITY, N. J.

ROOFING SLATE
We operate our own quarries, manufacture and sell all grades of Slate, Roofers' Supplies, Tools, Cement, Nails, Felt.
Write for delivered prices.
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CLEVELAND, O.

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IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

PATTERNS
For Stoves and Heaters
First-Class in Wood and Iron
Vedder Pattern Works, Troy, N.Y.
Established 1855

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For Stoves and Heaters
The Cleveland Castings Pattern Co.
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DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
QUINCY, ILL.

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Since 1874

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LOCK-JOINT Metal Ceiling WILL SELL

When you can offer ceilings with genuine advantages which can be absolutely demonstrated there is no question about their selling.

LOCK-JOINT METAL CEILINGS can be proven **entirely Dust-proof and Air-tight** which is a clinching argument.

Money is Being Made

every day by dealers everywhere with **Lock-Joint Metal Ceiling** because their competitors cannot secure ceilings which will cope with them when it comes to selling qualities.

We would be pleased to send you **Catalog "D,"** showing handsome panel effects and artistic combinations which will undoubtedly interest you. Write for it.

S. Keighley Metal Ceiling & Mfg. Co.
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Sheet Metal Ornaments and Statuary

Detail Work a Specialty

Ask for Catalogue

1227 Manchester Ave.
ST. LOUIS, MO.

SKYLIGHTS

for any purpose. Our new and complete catalogue is now ready for distribution.

THE CANTON ART METAL CO.
CANTON, OHIO

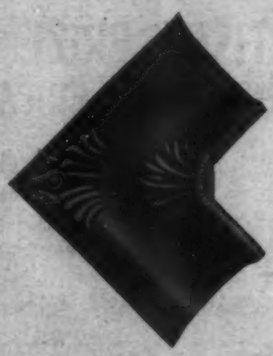
ELEVATORS

Improved Quick and Easy, Rising Steam, Electric and Hand Power.

SEND FOR CIRCULAR

KIMBALL BROS. CO.
1031 Ninth St. COUNCIL BLUFFS, IOWA
Kimball Elevator Co., 139 Vincent St., Cleveland, O

The F.-V. Co. Ornamental One-piece Mitre



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ORNAMENTAL
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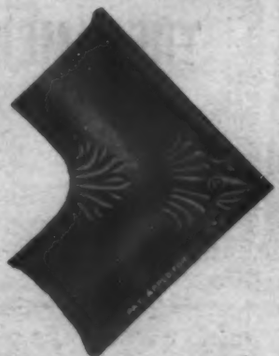
Write for Prices and Samples



Friedley-Voshardt Co., 194-204 Mather Street, **Chicago**

CUT THIS OUT

To the Publishers

The American Artisan and Hardware Record
355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

NAME .....

ADDRESS .....

TOWN .....

STATE .....

It Will Become a Habit

If you have never tried your hand at window dressing and if you have not learned from experience that attractive windows always produce splendid returns in the way of sales and profits, you have been doing yourself and your business an injustice. But that does not mean that there is no chance for you to win a share of the

$100.00 IN GOLD

offered by THE AMERICAN ARTISAN in its

Window Display Competition

if you will only enter, because you probably have just as good and maybe better ideas of what attractive displays are than the other fellow—all you want to do is to express them. And furthermore, it's a sure thing if you once start placing real displays in your windows, the results will prove so satisfying that it will become a habit with you to keep your windows well dressed and attractive.

Try it once anyway and let us have a photo of your display.

$50.00 $50.00 in Gold for photograph and description of Best Window Display of Hardware.

$25.00 $25.00 in Gold for photograph and description second in excellence.

$15.00 $15.00 in Gold for photograph and description third in excellence.

$10.00 $10.00 in Gold for photograph and description fourth in excellence.

CONTESTANTS—Any hardware dealer, or his assistant or clerk, is eligible to this competition.

TIME—The photographs may be sent by mail or express, charges prepaid, and must reach this office not later than noon, March 15, 1909. Address all photographs to

THE AMERICAN ARTISAN PRIZE COMPETITION
355 DEARBORN STREET, CHICAGO, ILL.

CONDITIONS—Each photograph must be signed by a fictitious name or device, and the same name or device must be put upon a sealed envelope, containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph.

AWARD OF PRIZES—A Competition Committee of three, one of whom will be an expert window dresser and one an experienced hardware man, will pass upon all photographs and descriptions received within the prescribed time and will decide between the contestants.

THE AMERICAN ARTISAN reserves the right to publish all photographs and descriptions of same submitted in this competition.

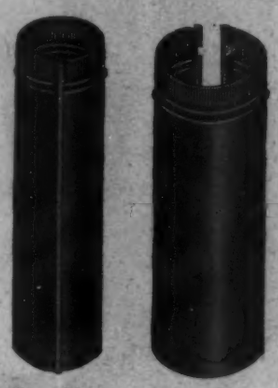
Always in Stock—Stove Pipe and Elbows

We carry full stock in all our warehouses

St. Louis, 1006-8-10 Spruce Street
Chicago, 23-25-27 N. Clinton Street
Philadelphia, 402-404-406 Race St.
New York City, 47 Cliff Street
Boston, Mass., 132-134 Pearl Street
Chattanooga, Tenn., King Street

WRITE TO NEAREST WAREHOUSE FOR PRICES. IT PAYS TO ASK QUESTIONS

NESTED STOVE PIPE — STAR BRAND — CRESCENT BRAND — WHEELING BRAND

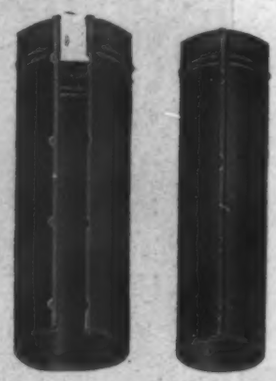


Star Nested Stove Pipe
Locks on the Inside

W.C.Co. Stove Pipe Elbow Four Piece

W.C.Co. Stove Pipe Elbow One Piece Corrugated

Made in Even Colored Steel. Wellsville Polished—Woods Planished and Steel Galvanized.



Crescent Nested Stove Pipe
Locks on the Outside

MANUFACTURED BY
WHEELING CORRUGATING CO., Wheeling, W. Va., and Martin's Ferry, Ohio

MILLS AND FACTORIES

ANOTHER DESIGN

One of the many we have to select from. You can find something suitable for any style or size room. Send us the dimensions of your next ceiling and let us submit something appropriate.

F. O. SCHOEDINGER, Dept. 3, 146—North Third Street—148 **Columbus, Ohio**

AMERICAN INGOT IRON

RUST RESISTING SHEETS

99.94% PURE

AMERICAN GENUINE INGOT IRON All

Write for Price Sheet AA On Roofing, Black and Galvanized Sheets

Purest Iron Made In This Country or Abroad

Accelerated Acid Tests Demonstrate Its Superiority to Charcoal Iron Sheets

MIDDLETOWN, O.

MANUFACTURED EXCLUSIVELY BY

THE AMERICAN ROLLING MILL CO.

MIDDLETOWN, OHIO

Two Hand Made Roofing Plates of High Standard

BERGER'S

TOP NOTCHER
40 lb. coating

TUSCORA
25 lb. coating

Two Points of Importance in their Manufacture

1 **Base:** Extra Soft Open Hearth

2 **Coating Process:** Through Palm Oil, Flux and Finish.

Weight of Coating on Every Sheet

We also furnish Open Hearth Steel Base Plates in all other weights of coating; Charcoal Base Plates; Bright Charcoals; Bright Cokes including furnace pipe sizes.

GET OUR PRICES. WRITE TODAY.

THE BERGER MFG. CO.

CANTON, OHIO

Branches:—NEW YORK, PHILADELPHIA, BOSTON, CHICAGO, ST. LOUIS, MINNEAPOLIS, SAN FRANCISCO, ATLANTA

When Ordering **Charcoal Iron Conductor Elbows**

Specify With

GUARANTEE *F. Dieckmann* **Stamped in the Metal.**

CHARCOAL IRON

Makers of the Elbows which can be erected without Refitting and Solder, save Labor and Material.

THE FERDINAND DIECKMANN CO.

Station B, CINCINNATI, OHIO

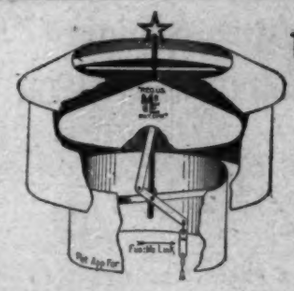
CHARCOAL IRON

More resistant to corrosion than anything made. Demonstrate it for yourselves, by sending for method of test. A simple test will enable you at once to distinguish between Charcoal Iron and Steel.

Terne Plates, Long Terne Sheets, and Black Sheets, all from our famous charcoal iron base.

Griffiths Charcoal Iron Mills

Washington, Pennsylvania.



The "STAR" VENTILATOR

AND

The FIRE RETARDING "STAR" VENTILATOR and DAMPER COMBINED

Embody everything in the Best Scientific Storm Proof Ventilator.

MERCHANT'S METAL "SPANISH" TILES and "GOTHIC" SHINGLES.

These Tiles and Shingles have proved meritorious for years. They are in demand where ornamentation is essential. Also Lightness and Durability are special features of merit.

Write for Booklets.

"Reg. in U. S. M&E Pat. Off."

Merchant & Evans Co.

Sole Manufacturers

Philadelphia New York Brooklyn Baltimore Chicago Kansas City Denver

SIX STANDARD PRODUCTS

USED BY ALL THE LEADING STOVE AND RANGE MANUFACTURERS

W. Dewees Wood Company's Patent Planished Iron.
Wood's Cleaned Refined Smooth Finish.
Hammered Polished Steel.
Wood's Oak Stove Body.
Wellsville Polished
Range Steel.

MANUFACTURED BY

AMERICAN SHEET AND TIN PLATE COMPANY

FRICK BUILDING PITTSBURGH, PA.

THE "BEST" Revolving Chimney Top

Simple, Durable, Easy to Attach. Held as Firmly as the Chimney Itself.

It is all made of cast iron except the vane which is heavy steel.

It is perfectly adjusted. Rain is absolutely prevented from entering the chimney. It is practically indestructible and will last for years.

Write for illustrated catalog.

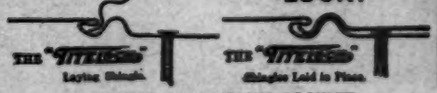
STERLING FOUNDRY CO.
Sterling, Ill.

Style "A" Showing Method of Laying

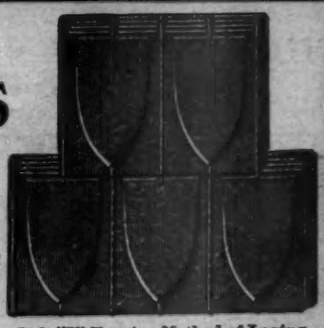
"TITELOCK" METAL SHINGLES

THE MOST PERFECT MADE

NOTE THIS ABSOLUTELY WATERTIGHT LOCK!



SEND FOR SAMPLES AND BOOKLET



Style "B" Showing Method of Laying

"Invisible Joint" STEEL CEILINGS

TRADE MARK

WRITE FOR CATALOG AND PRICES

MILWAUKEE CORRUGATING CO.

MILWAUKEE, WIS. KANSAS CITY, MO.

Standard Metal Shingles

The Canton Ventilator

Made with Metal and Glass Tops and with and without Automatic closing device.

THE CANTON MFG. CO.
CANTON, OHIO
Makers of
Cornice, Skylights, Metal Ceilings, Eaves Trough, Conductor Pipe, Etc.

Gray's School of Sheet Metal Pattern Drafting

3 Months Trial Course for $5.00

A trial will convince you that this course is just what you want. You need not sign application or bind yourself in any way.

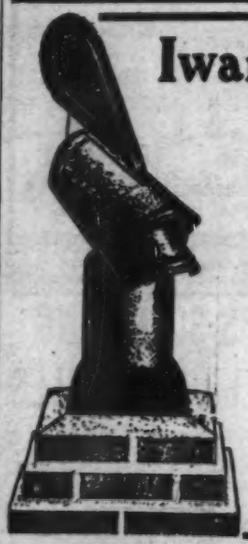
If after taking the three months course you find it to be just what you want and wish to continue the full 25 months course then the $5.00 you have paid will be credited against the full $35.00 course and the balance $30.00 can be paid $2.00 monthly.

Cut this Ad out and enclose it with $5.00 to this school, and the three months drawings and instructions will be sent you prepaid the same day received. Drawings and instructions to be sent to,

Name.....Address.....

City.....State.....

Address, GRAY'S SCHOOL, 1028 Jackson Ave., New York, N. Y.



Iwans' Volcano Revolving Chimney Top

Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

Send postal for catalogue.

IWAN BROTHERS
Mfrs. of Hardware Specialties
STREATOR, ILL.

The Powers AUTOMATIC Chimney Top

Iron mountings only or complete with cover and vane.

Double the sale and triple the efficiency of smoke stacks.

Powers & Williams
Streator, Ill.

Ask us for prices on skylight glass and metallic skylights.

DELPHOS B. B. GALVANIZED SHEETS

Absolutely Perfect.

DELPHOS Corrugated, Pressed Standing Seam, V Crimp, Three V Crimp, Roll, and Roll & Cap Galvanized Roofings.

All Roll Roofings Resquared and Double Cross Locked.

DELPHOS Galvanized Eaves Trough, Conductor Pipe, Elbows, Etc. Roofing Plates (All grades).

SOLDER—Faultless, B. T. & L. and Standard Brands.

DELPHOS MFG. COMPANY
DELPHOS, OHIO
Write for our New Catalogue.

Uno Revolving Ventilators

A sure cure for smoky chimneys, the best for ventilation.

4" to 30"

Send for Catalogue

Uno Ventilator Co.
P. O. Box 260. LYNN, MASS.

C. N. HOOPER, Dubuque, Ia.

Vitreous Enameling
TECHNOLOGIST

Designs, builds and starts new plants, improves quality and reduces the costs in those already established.

Have you entered ?
Are you going to enter ?

THE AMERICAN ARTISAN Window Display Competition for $100.00 IN GOLD.

DISCRIMINATING DEALERS ENDORSE "ELLER"

ART METAL CEILINGS

TIN AND TERNE PLATE
EAVES TROUGH, CONDUCTOR PIPE
ELBOWS and SHOES

STEEL ROOFING
BRICK and STONE SIDING
CORNICE and SKYLIGHTS

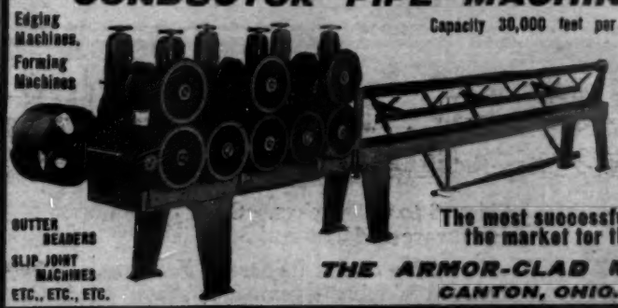
"The ELLER trade-mark stands for the best in steel." *Write to-Day* for Catalog.

ELLER MFG. CO. : : CANTON, OHIO

CONDUCTOR PIPE MACHINERY

Edging Machines.
Forming Machines

Capacity 30,000 feet per day of 10 hours.



Plain Round, Round Corrugated and Fluted PIPE.

GUTTER BEADERS
SLIP JOINT MACHINES
ETC., ETC., ETC.

The most successful machine on the market for the purpose.

THE ARMOR-CLAD MFG. CO., CANTON, OHIO.

PATENT APPLIED FOR.

LOGAN'S SOLDERING IRON HANDLES

This Handle is made of Gas Pipe and the best hard wood; is neatly finished; will not heat in use, and will not break. The Irons can be instantly fastened or released by turning a set screw. EVERLASTING. TRY THEM. We also keep a large stock of the finest Soldering Irons made.

BERGER BROS. CO. OFFICE AND STORE: 237 Arch St. WAREROOMS: 100-02-04 Bread St. FACTORY: 3114-16-18-20 N. 17th St. PHILADELPHIA

EXCELSIOR SQUARING SHEARS

TOOLS FOR SHEET METALS

INCLUDING

Tinners' and Roofers' Tools, Shears, Punches, Presses and Dies. Can-making Machinery

MADE BY

Niagara Machine & Tool Works
BUFFALO, N. Y.

MARVEL

Patent applied for

PORTABLE PUNCH No. 20

Made entirely of STEEL

Punches ¾ in. hole in ¾ in. and equivalent

Let us send you one on trial.

Write for circular and price of this and other Marvel Punches and Shears.

ARMSTRONG-BLUM MFG. CO., 106 N. Francisco Ave., Chicago, Ill.

C. G. Hussey & Company

PITTSBURGH, PENNA.

Manufacturers of

Soft Copper, Copper Gaskets, Copper Bottoms, Soldering Irons

Copper Nails and Tacks, Tinned Copper, Polished Copper,

Cold Rolled Copper, Special Shapes Sheared or Stamped, Slat ng Nails,

PROMPT SHIPMENT FROM STOCK.

The WINTER HARVEST IS AT HAND

No. 32 Torch, $4 Net

Is your competitor going to get your share? He surely will if you are not prepared to promptly attend to any freeze-up repair order, as your customer will not wait, but will insist on immediate attention. If you have plenty of torches you will have no trouble in attending to your customers' orders, and may also get a few of your competitor's, thereby getting a chance to make them yours.

The No. 32 Torch Has No Equal. Our catalog tells all about it—It's free. Jobbers supply at factory price, or we will ship direct, if cash accompanies the order.

CLAYTON & LAMBERT MFG. CO.
Detroit, Mich., U. S. A.

H. WEISS & CO.

20 Cliff St., New York

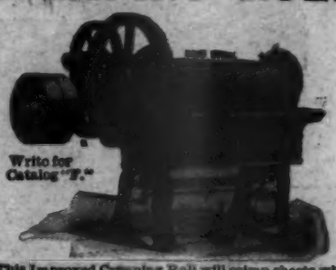
Hand Punch for No. 10 Iron

Skylight Gearing and Chain Lifts

Tinsmiths' and Plumbers' Tools. Cornice Makers' Tools. Coppersmiths' Tools
Pipe Threading Machines

Second-Hand Goods Bought, Sold and Exchanged

CRIMPING ROLL



Write for Catalog "F."

This Improved Crimping Roll will crimp sheets without buckling them. We build a complete line of Shears, Punches and Bending Rolls, all sizes for hand or power drive. BERTSCH & CO., Cambridge City, Ind.

BICKNELL'S

Original

Handy Tools

Modern High Standard Hand and Power Punches and Shears, Emery Grinders, Jointers and Special Machines

We also manufacture up-to-date Iron and Wood-working Machinery

Write for Complete Catalog

The Bicknell Mfg. & Supply Co.
Janesville, Wis.

Thompson Bros., Muscatine, Ia.
Write: "Please stop our ad. for Tinner. The first issue brought results."

WE CAN MEET THE DEMAND
for "SOMETHING DIFFERENT" in

METAL CEILINGS AND SIDE WALLS

Our goods are different. The designs are NEW and ORIGINAL. The PLATES are ACCURATE. The JOINTS fit PERFECTLY. For ECONOMY in the COST OF ERECTION our plates lead all others. We are quick shippers and can give you satisfaction. Write to-day for CATALOG "A."

Wm. Foster & Sons Sheet Metal Works, 1000 E. Carpenter St. SPRINGFIELD, ILL.

La Crosse Steel Roofing and Corrugating Co.

LA CROSSE, WISCONSIN

MANUFACTURERS OF

EAVES TROUGH
CONDUCTOR PIPE
CUT OFFS
MITRES, ENDS AND DROPS
ROOFINGS AND SIDINGS
STEEL CEILINGS
CORNICES
SKYLIGHTS

Quick Shipments Our Specialty *Send for Catalog*

Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths. [redacted] Will not burst when full of ice.

CLARK, QUIEN & MORSE. PEORIA, ILL.

HENKEL'S AUTOMATIC RAIN WATER SHIFTER

Guarantees Pure Water in Your Cistern

It permits only pure, clean rain water to enter the cistern. It automatically carries the first sooty, filthy drainage from the roof to the waste pipe, and not until the water runs clear and pure does it go into the cistern.

IT IS AUTOMATIC—SET IT ONCE

No more going out in the rain—no more trouble or cleaning cisterns—pure, clean water always.

Write for circulars prices and full information

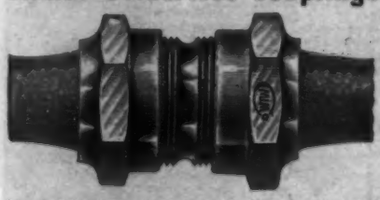
THE HENKEL MFG. CO., Canal Dover, Ohio

RUBY FLUID

Is an anti-rusting, non-corrosive, non-poisonous and non-explosive, not affected by age or change of temperature or exposure in open vessels. It is a perfect flux for GALVANIZED and ALL other metals. Shipped in tin cans, ready for use. On ten days trial.

The Ruby Chemical Company, Johnstown, Ohio, U. S. A.
Chas. M. Hoover, Sales Mgr., Revere House, Chicago.

Mimco Solderless Couplings



NO SOLDER (Patented) NO SOLDER

Do away entirely with wiping joints.
A Practical article and BIG SELLER.
Send for Descriptive Circular and Price List.

MODERN IMPROVEMENTS MFG. CO.
468-470 17th Street BROOKLYN, N. Y.

TWO MORE REASONS WHY STEEL BRAKES EXCEL

OTHERS WILL FOLLOW

The strength of steel being approximately three times that of iron it is clear that much heavier work can be done with the same effort on a brake so constructed.

Another quality of steel is that it will not warp like wood nor get sprung as iron will, thus assuring a straight and perfect bend always.

A postal will bring you net prices F. O. B. your city.

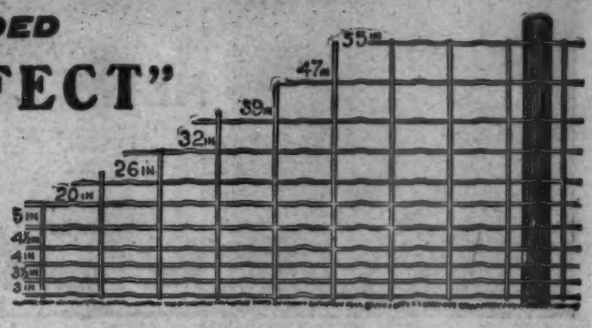
DREIS & KRUMP MFG. COMPANY
Halsted and 32nd Street, CHICAGO

Good Window Displays Pay See Page 44

Eliminate All Your Fence Troubles by Using the

ELECTRICALLY WELDED

"PITTSBURGH PERFECT" Fences



The strongest on the market and the most satisfactory. You can't know what a really good fence is until you have tried the

"PITTSBURGH PERFECT."

WRITE FOR OUR CATALOG TO-DAY.

Pittsburgh Steel Co., Pittsburgh, Pa.

Don't Buy Any Wire Fence

until you have seen the **"SWINGING JOINT"** construction of **"APEX" FENCE,** and learned of its superior merits, and practical advantages to the fence user.

One good retail dealer wanted in every town. Exclusive Agencies. Write for catalog.

JANESVILLE BARB WIRE CO.

Janesville, Wis.

Makers of Barb Wire, Wire Nails and Woven Wire Fencing

We Manufacture 12 and 14 Mesh

ALUMINOID

in all widths made of 33 wire.

Heavy in 28 wire.

SEND FOR SAMPLES.

NATIONAL WIRE CLOTH CO., Niles, Mich.

YALE

Russia Finish, pat. Lock

Stove Pipe

It is made of a very high grade of uniform color Blue Polished Steel and is coated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States. Mfg. by

HEMP & CO.,
2nd & Choutean Ave.,
ST. LOUIS.

In the event your jobber does not handle this pipe, send your inquiries to us.

DEALERS! Here is a sample of our Farm Advertising

Handle ours and you will be on the right side. The farmer knows about them. We have a branch at Kansas City and can ship on short notice.

"THE DENNING" CORN CRIBS AND GRAIN BINS

Will store your whole crop at a nominal cost.

"THE DENNING" FENCE

Will take care of your poultry, hogs and stock.

"THE DENNING" LAWN FENCE

Will ornament your premises.

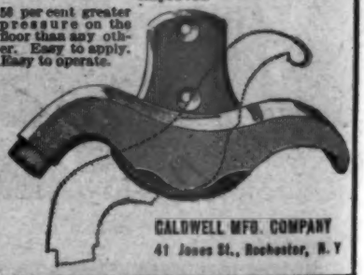
Ask your dealer for "The Denning." Take no substitute.

THE DENNING WIRE & FENCE CO. CEDAR RAPIDS, IOWA

Empire Door Holder

Improved

50 per cent greater pressure on the floor than any other. Easy to apply. Easy to operate.



CALDWELL MFG. COMPANY
41 Jones St., Rochester, N. Y

WE want agents in every state in the Union to take subscriptions for THE AMERICAN ARTISAN. Agents can devote all or part time. Subscribers can make a nice little sum each week on the side by devoting their spare time to this work. Write for agents' terms. Sample copies sent upon request. Address, THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Ill.

COVERT'S SAFETY DOOR HOOK

LIGHTNING RODS

We manufacture Pure Copper Wire Cable Lightning Rods, made of 28, 30 and 49 Wires, with complete outfit of trimmings.

E. A. FOY & CO., Cincinnati, Ohio

Trade Supplied at Lowest Rates.
Send for Catalogue "B."

The Largest Assortment of HONES in the world.

Also a complete line of cutlery, razor strops and hardware specialties.

S. R. DROESCHER, Importer and Mfr.
79 Warren St., New York, N. Y.

C. De Witt Wagner, 406 Third Ave., Cedar Rapids, Ia., writes: "Please accept my thanks for your help in securing a tinner for me. I had letters from several states which goes to show that The Artisan is read."

THE HARRINGTON AND KING PERFORATING CO.

PERFORATED METALS
OF EVERY DESCRIPTION AND FOR ALL PURPOSES
FOR SCREENS OF ALL KINDS

No. 212 NORTH UNION STREET, CHICAGO, ILL.
New York Office, 114 Liberty Street.

We have the best Pure Copper Cable

Lightning Rods

and fixtures on the market, and to prove what we say is right, we are willing to send any firm a sample outfit and they can look it over, and if it is not the best they have ever seen, and not satisfactory in every way, we want the whole shipment returned at our expense and it costs them nothing. We manufacture all our own goods and know just what they are, and we want every hardware dealer to write to us for prices and territory. We give a $500.00 guarantee and also one of our improved static machines.

WRITE TODAY TO

Maher & Son Lightning Rod Co., Preston, Iowa

WE HAVE A HARDWARE DELIVERY WAGON THAT YOU CAN DEPEND UPON

Body 20 inches from the ground, full width; regular height wheels, and yet will turn short.

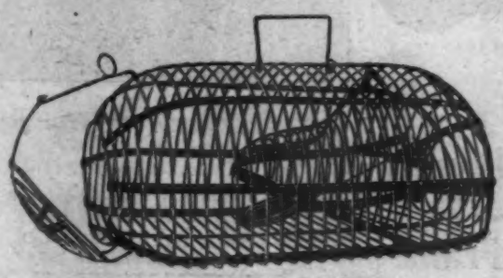
Easy to Load and Unload

Durability guaranteed.
Complete catalogue on request. Mention this paper and address in full.

SYCAMORE WAGON WORKS, 109 Edwards St., Sycamore, Ill.

The Bromwell Brush and Wire Goods Co., Cincinnati, Ohio

MAKE MORE RAT TRAPS THAN ANY OTHER MAKERS IN THE WORLD



ALL LOCKED RIBBED

Five Sizes. Steel Wire and Ribs. Patent Flange, Safety Doors. All Traps Lacquered. Rust Proof. Traps always set. Rats cannot escape when in the Trap. Strongest, best made, most saleable Traps in the market.

WRITE FOR 1909 CATALOGUE

We make all kinds of Brushes and Wire Goods. Started in 1819 and still at it. GET OUR PRICES.

IT WILL PAY YOU to enter into Competition for the

$100.00 IN GOLD

For the ANNUAL PRIZE WINDOW COMPETITION of

THE AMERICAN ARTISAN

DISSTON SAWS

Run Easiest
Cut Fastest
Last Longest

To the practical Saw User this tells the full story of HIGHEST PERFECTION in Material, Temper, Design and Workmanship attained for the DISSTON BRAND OF SAWS.

HENRY DISSTON & SONS, Inc.
Keystone Saw, Tool, Steel and File Works
PHILADELPHIA, PA.

A NEW PATTERN STANDARD LEVEL—Two Level Glasses, One Plumb Glass

Side glasses may be reversed at any time; all easily adjustable; all glasses in plain view from both sides; brass trimmings on both sides.

No. 31—Solid Cherry.
No. 32—Three-piece Cherry.
No. 33—Solid Mahogany

THE BAKER-McMILLEN COMPANY, Akron, Ohio

"Yankee Tools"

Are Without Equal in Quality or Efficiency in Practical Use

New Styles—Have You Seen Them?

MAGAZINE RATCHET SCREW DRIVER, NO. 65

RATCHET DRIVER with SCREW HOLDER NOS. 110-111-115

RATCHET "SCREW EYE" DRIVER, NOS. 80 and 81

ASK YOUR JOBBER ABOUT THEM

Send for "Yankee" Tool Catalog.

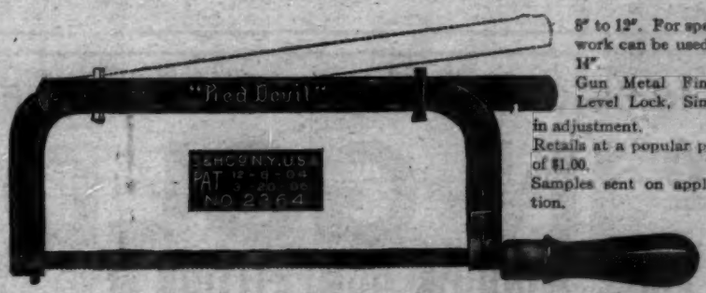
North Bros. Mfg. Co., Philadelphia

Shelf Boxes,
Hardware Shelving,
Counters,
Screw, Bolt and
Seed Cases,
Store Ladders,
Glass Cutting Boards,
Immediate Shipments,
Send for Booklet.

W. B. HELLER & CO.,
MONTPELIER,
OHIO

INTERCHANGEABLE
LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

Genuine "RED DEVIL" Hack Saw Frame



8" to 12". For special work can be used on 14".
Gun Metal Finish, Level Lock, Simple in adjustment.
Retails at a popular price of $1.00.
Samples sent on application.

Order through your jobber or direct from us. Insist upon the Genuine "RED DEVIL"

SMITH & HEMENWAY CO., 108-110 Duane Street, New York City

-SHELVING-
WARREN SYSTEM
SELF PAYING
HARDWARE STORE EQUIPMENT
IN INTERCHANGEABLE SECTIONS
& SCREW, BOLT & GUN CASES.
J. D. WARREN MFG. CO., CHICAGO U.S.A.

Advertising is BUSINESS BAIT

No. 108 AUTOMATIC DRILL

This tool is of superb design and construction, the working parts are of the finest materials, making a very satisfactory and durable tool, one which it is a pleasure to supply to your customer.

You should investigate this tool, sending for our catalog and prices, which will prove very interesting to you, as we manufacture many tools which are of interest to your trade.

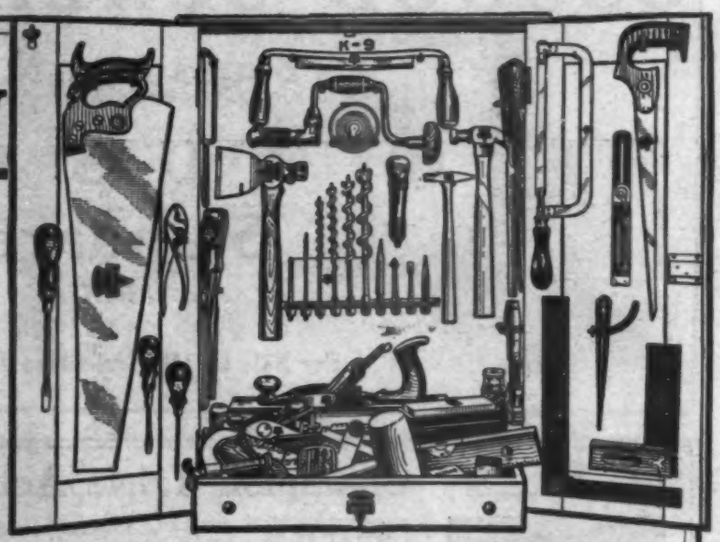
GOODELL-PRATT COMPANY,

Toolsmiths

Greenfield, Mass., U. S. A.

Order Now

KEEN KUTTER TOOL CABINETS



FOR THE **HOME** AND **SHOP**

E. C. SIMMONS KEEN KUTTER Trade ST. LOUIS U.S.A. Mark

KEEN KUTTER THE KIND THE PEOPLE WANT AND CALL FOR **KEEN KUTTER**

Tool Cabinet Booklets, with Your Firm Name printed on, FURNISHED FREE
ALSO COMPLETE NEWSPAPER ADVERTISEMENTS

See Our Salesmen or Write Us for Prices. Address DIVISION 5

SIMMONS HARDWARE CO., INCORPORATED **ST. LOUIS, MO.**

LUFKIN Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

¶ It takes but a minute and a postal to ask for our catalog—it's more than worth while.

Please Mention The American Artisan

THE LUFKIN RULE CO. Saginaw, Mich., U. S. A.

New York London, Eng. Windsor, Ont.

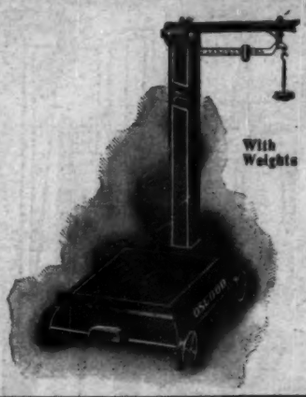
YANKEE [All Steel] DAMPERS and CLIPS

FOR SMOKE PIPE AND FURNACE PIPE

THE S. M. HOWES COMPANY, 40-46 Union St., BOSTON

OSGOOD SCALE CO.

Binghamton, N. Y.



U. S. Standard

ALL KINDS

For Sale by all First Class Jobbers.

Champion Triple Action Ice Cream Freezer

Made in Four Sizes

1 Quart	each, $1.00
2 Quarts	each, 1.25
3 Quarts	each, 1.50
4 Quarts	each, 1.75

WHAT IT IS The "Champion" Freezer is especially adapted for Household Use. Its principles of construction, beside being absolutely New, are entirely Different, Novel and Better than any of the new style of household freezers placed on the market during the past few seasons. Besides being better, you can guarantee the "Champion" to your customers as being durable.

WHAT IT IS CONSTRUCTED OF The Outside Tub is made of best galvanized iron. The dasher is made of malleable iron, heavily tinned, with a Wood Scraper, which prevents the cream from adhering to the sides of the freezing can while in process of freezing. The Cylinder or Freezing Can is made from block tin (re-tinned.)

WHAT IT WILL DO We know that if you sell freezers, and wish to handle one that will give your trade satisfaction, and do all that the manufacturers claim it will do; that you can sell at about one-half the price of any of the old style freezers (besides giving you a liberal profit) and a freezer that will make the finest Ice Cream, Sherbets and Frozen Desserts in a few minutes, our "Champion" Freezer is the one for you to handle.

17-19 Ninth St. REID-EDELMUTH MFG. CO. Brooklyn, N. Y.

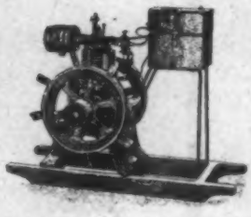
Chambers & Hudson Sts., New York, N. Y.

B. L. SCHMIDT, PRES. F. L. SCHMIDT, VICE PRES. SAM T. WHITE, SECY. & TREAS.

WHITE LILY MFG. CO.

MANUFACTURERS OF WASHING MACHINES AND GASOLINE ENGINES

THE WHITE LINE IS THE RIGHT LINE.



BRANCHES: TOLEDO, OHIO / SAN FRANCISCO, CAL.

DAVENPORT, IOWA

Nov. 30, 1908.

Mr. Daniel Stern,

Publisher THE AMERICAN ARTISAN,

CHICAGO.

Dear Sir:-

We take pleasure in herewith enclosing contract for renewal of our advertisement in THE AMERICAN ARTISAN and Hardware Record for the year commencing December 5th.

We are glad to say that this year has been a very profitable one with us, and while we believe that our business has continued to be good through a period as unfavorable as has just passed, because our machines have always maintained a standard of excellence, we are not unmindful of the credit which is due THE AMERICAN ARTISAN, through which we have kept our line before the hardware trade.

We feel that we can always depend upon THE AMERICAN ARTISAN as a medium for reaching the hardware trade and always making good.

Very truly yours,

WHITE LILY MFG. CO.

S/E

By Sam T. White

Secy. & Treas.

ACTUAL VALUE FOR YOUR MONEY

Big Profits for Jobber and Dealer

WE CREATE THE DEMAND BY ADVERTISING

YOU REAP THE BENEFITS BY HANDLING OUR GOODS

Every Razor Guaranteed

Put these Goods on Your Counter

This is a Fast Seller and brings Customers into Your Store

It's All In The BLADE

THREE GRADES OF SAFETY RAZORS RETAIL AT 25c., 50c. AND $1.00. CUT REPRESENTS OUR 25 CENT SHAVER'S OUTFIT COMPLETE WITH 3 BLADES

Order Today. Don't Wait. Prices on Application.

BURHAM SAFETY RAZOR CO., Dept. C., 66 Murray Street, N. Y.

Agate NICKEL-STEEL Ware

AGATE L & G Mfg. Co. NICKEL-STEEL WARE

is absolutely free from poisonous substance, is made by careful, experienced men, by a company founded in 1850. The first enameled ware and blue and white ware made in this country was made in our mills. We know how to make enameled ware safe and durable. We make it safe and durable because we are proud of the trade mark. Look for the blue label.

Lalance & Grosjean Mfg. Co.

Chicago New York Boston

Window Display Designed by R. L. Turner for Pearson Bros., Keene, N. H.

Suppose this display were in YOUR window Any question in your mind as to its

Attracting Attention?

Have you decided what kind of a window display you are going to make for the Holidays? It will have to be something unusual to attract attention alongside of the Santa Claus and Christmas Tree windows that will be shown on your street.

With Brother Bill (an actual *life size* lithographed cut out) you can make window displays that are both *unusual* and *attractive* and at practically no expense.

Let us tell you how to get a Brother Bill cut out.

The Pritchard-Strong Co.

25 Circle Street :: :: Rochester, N. Y.

ATLANTIC

High Grade

Tin, Copper and Galvanized Ware

is recognized as being the very best on the market

ATLANTIC WASH TUBS

Made from smooth galvanized sheets, double seamed. Have raised corrugated bottoms and can be had with our new patented wedge shaped wringer attachment. This makes the fastening of wringer easy and pulling off impossible.

ATLANTIC OIL CANS

all kinds and sizes. Can be had with spout or faucet. They are well made, guaranteed not to leak. Funnel holes will admit the largest funnel. Each can is nicely labeled and wrapped in heavy manilla paper.

We also manufacture Pails, Garbage Cans, Refrigerator Pans, Wash Boilers, Dinner Pails, Dippers, Funnels, etc.

Write for complete catalog

Atlantic Stamping Co., ROCHESTER, N. Y.

"Enterprise" "Enterprise"

FOOD CHOPPERS MEAT CHOPPERS

SAUSAGE STUFFERS AND LARD PRESSES

The Best Made

The Best Liked

The Best Known

The Best Advertised

The above picture shows the graceful lines and strong simplicity of the "Enterprise" Food Chopper. A necessity in every kitchen because of its usefulness. An easy seller, because of its strong selling points—Perfect cutting mechanism. A tight true feed screw. Double tinned. Four knives with each machine.

DRIVE THESE TANDEM!

Every user of an **"Enterprise" Sausage Stuffer and Lard Press** needs an **"Enterprise" Meat Chopper.** Sell them together. Push them together. Drive them "tandem."

Every dealer, and almost every buyer, knows the superiority of genuine **"Enterprise" Choppers.**

Lest you forget, we remind you of these points about the **"Enterprise" Sausage Stuffer and Lard Press.**

Accurately-bored cylinder. Lips on the inner tin cylinder to make easy its handling when heated. No hot iron cylinder to handle when pressing lard. A patent latch which prevents breaking of plates. Patent corrugated spout prevents air entering the casing, thus assuring preservation of sausage.

Write for catalogue describing, illustrating and listing these and other "Enterprise" specialties. Get our advertising aids for dealers.

The Enterprise Mfg. Co. of Pa.

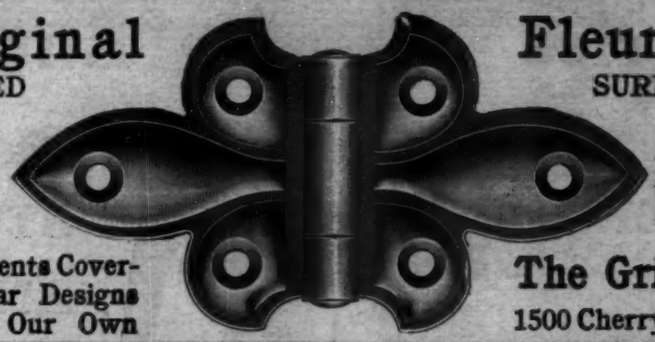
PHILADELPHIA, U. S. A.

21 Murray St., New York.

438 Market St., San Francisco, Cal.

The Original Fleur De Lis

PATENTED SURFACE HINGE



Dealers and Users Beware of Infringement

Made in All Finishes. They Have No Comparison for High-Class Work at Moderate Prices.

We Have Broad Patents Covering This and Similar Designs and Shall Protect Our Own

The Griffin Mfg. Co.
1500 Cherry St., ERIE, PENN.

You Are Invited to Take Notice of the

White Lily Motor Washer

¶ It will be a valuable addition to your line. ¶ This new Water Motor Machine is of standard **White Lily Quality** throughout. ¶ The motor is small and compact, but powerful. ¶ It is of the simplest construction, there being no springs in the cylinder, and only one in the piston. ¶ Wearing parts are all brass—Tubs of selected Louisiana cypress—Stave legs—Mahogany finish.

Operates on Very Low Pressure

WHITE LILY MFG. CO.
1500 Rockingham Road, Davenport, Iowa

The **QUEEN WASHER**

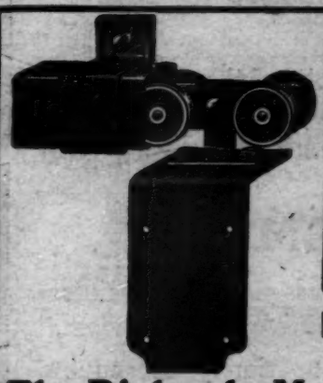
YOUR BUSINESS

DEMANDS that you secure the *Sole Agency* of this washer

It has the merit to make Large Sales for you and offers an opportunity you should not neglect. WRITE TODAY.

Not Sold to Jobbers except for Specified Territory.

JAS. H. KNOLL, - - Reading, Pa.



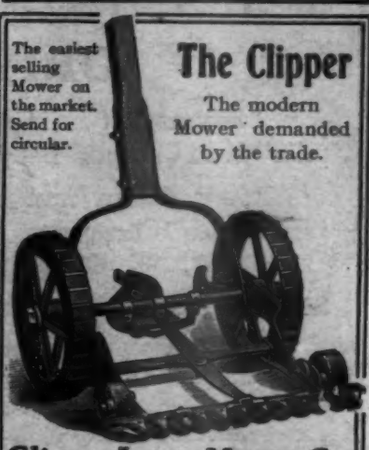
Richards Trolley Roller Bearing Barn Door Hanger

The Best Trade Winner on the Market
SPARROW PROOF
WATER PROOF
JUMP PROOF
Lateral Adjustment

Made to Suit Door of any Size or Weight

Write for Catalog of Door Hangers

The Richards Manufacturing Co., AURORA ILLINOIS



The easiest selling Mower on the market. Send for circular.

The Clipper

The modern Mower demanded by the trade.

Clipper Lawn Mower Co.
DIXON, ILL.
Manufacturer of Hand and Pony Mowers and Marine Gasoline Engines

Drink Pure Water

The No. 50 Star Pump shown here will positively purify the water in any well or cistern in a short time.

This purifying feature alone makes it the only pump fit to put in any well where the water is used for household purposes, for it will surely save its cost in the Doctor's bill many times over.

As it is made of No. 24 gauge galvanized iron it is a very substantial and handsome outfit, and will last for years.

Our line of purifying pumps is very complete. So is our line of Galvanized Chain Pump Curbs and Tubing.

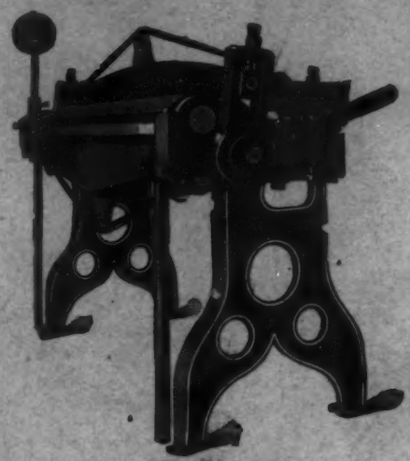
Ask your jobber for Star Pumps.

STAR BUCKET PUMP CO.
ST. LOUIS, MO.

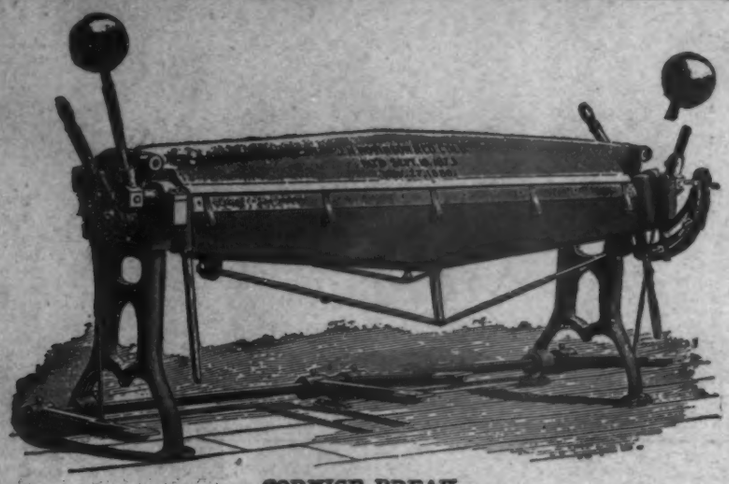
STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

Have you seen page 44 about the

Window Display Competition for $100.00 In Gold?



4 Ft. BRAKE
Capacity 12 Gauge.



CORNICE BREAK
Capacity, 20 Gauge and Lighter.

THE J. M. ROBINSON MFG. CO.

Manufacturers of Sheet Metal Working Machinery

3282 to 3288 Spring Grove Avenue **CINCINNATI, OHIO**

GOT THE PATTERNS HE WANTED

To THE AMERICAN ARTISAN:

I wish to take this opportunity to thank you and my brother "tinks" for patterns for the one-piece chimney cap that I have been looking for. I have received cuts and patterns from all over the country through your valuable paper for the chimney cap, and as it would take me quite a while to write letters of thanks to all those who have submitted patterns through THE AMERICAN ARTISAN, I wish to convey my thanks to them and to you through your paper.

815 State Street, Bowling Green, Ky., Sept. 1, 1908. JOHN F. CARTWRIGHT.

Style C

The Genuine
Philadelphia
Lawn Mowers

Style A

Recognized as

Standard Mowers

The World Over

They are guaranteed against imperfections and warranted to give entire satisfaction.

Be sure you handle the lawn mowers with the words PHILADELPHIA LAWN MOWER CO. cast on the wheels. They are the mowers that will entirely satisfy your customers.

The Philadelphia Lawn Mower Co.

3101 to 3109 Chestnut Street **PHILADELPHIA, PA., U. S. A.**

Style E

Send for CIRCULARS and PRICES

Simple in construction, light running, durable. The best Hand and Horse Mowers on the market.

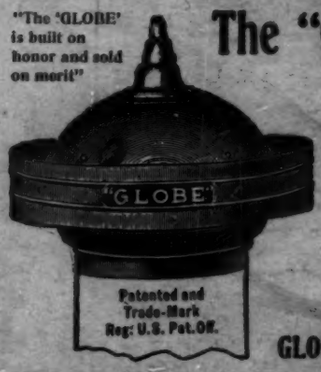
Style K

THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size and bead, and the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit"

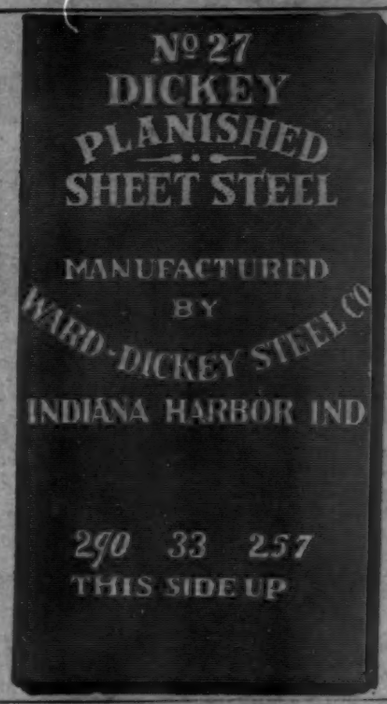


The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Sky-light purposes.

ABSOLUTELY STORM PROOF
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character
SMOKY CHIMNEYS CURED

"GLOBE VENTILATED RIDGING"
Send for Pamphlet
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N. Y.



Dickey Planished Sheet Steel

This Steel is Hammer Polished. It has the imported Russia Iron finish

It stamps and wears finely, without breaking or destroying the finish. Our Steel

Stands the Heat Retains Its Color

Under long and high heats it proves its superiority over all others.

Users say:
"It works like copper—never breaks." Send for Circular and prices.

A HANDSOME PROFIT

can be made on every item of our justly celebrated

Enameled Ware, Tin Ware, Japanned Ware and Galvanized Ware.

This Water Pail is only one of our line of many salable goods consisting in all of

OVER 500 FAST SELLING ITEMS
Star Enameling & Stamping Co., PITTSBURGH, PA.

We have installed Machines for decorating Cans and would be pleased to submit estimates upon request.
STUBER & KUCK, Peoria, Ill.

This Space for Sale.
Inquire of Daniel Stern,
355 Dearborn St., Chicago

Everlasting Watchfulness

through every process and greatest care in selection of materials used, accounts for the uniformly good wearing qualities of

SCOTT'S EXTRA COATED
HAMMERED OPEN HEARTH
Roofing Tin

Made by
Follansbee Bros. Co.
PITTSBURGH

Have you read "TIN TRUTH"? Free copy if you mention this paper and send your business card.

Skylights and Cornices

Fireproof Metal Windows
(Glazed with Wire Glass)
Metal Ceilings and Side Walls
EASTLAKE METAL SHINGLES
Gutters and Conductors, Roofings of all Kinds.
Send for Catalogue and Prices.
The W. J. Burton Co.
Detroit, Mich.

The "CENTENNIAL"

RAIN - WATER - CUT - OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit **Corrugated** and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Manufactured only by

The Sullivan-Geiger Co.
19 & 21 E. South Street, Indianapolis, Ind